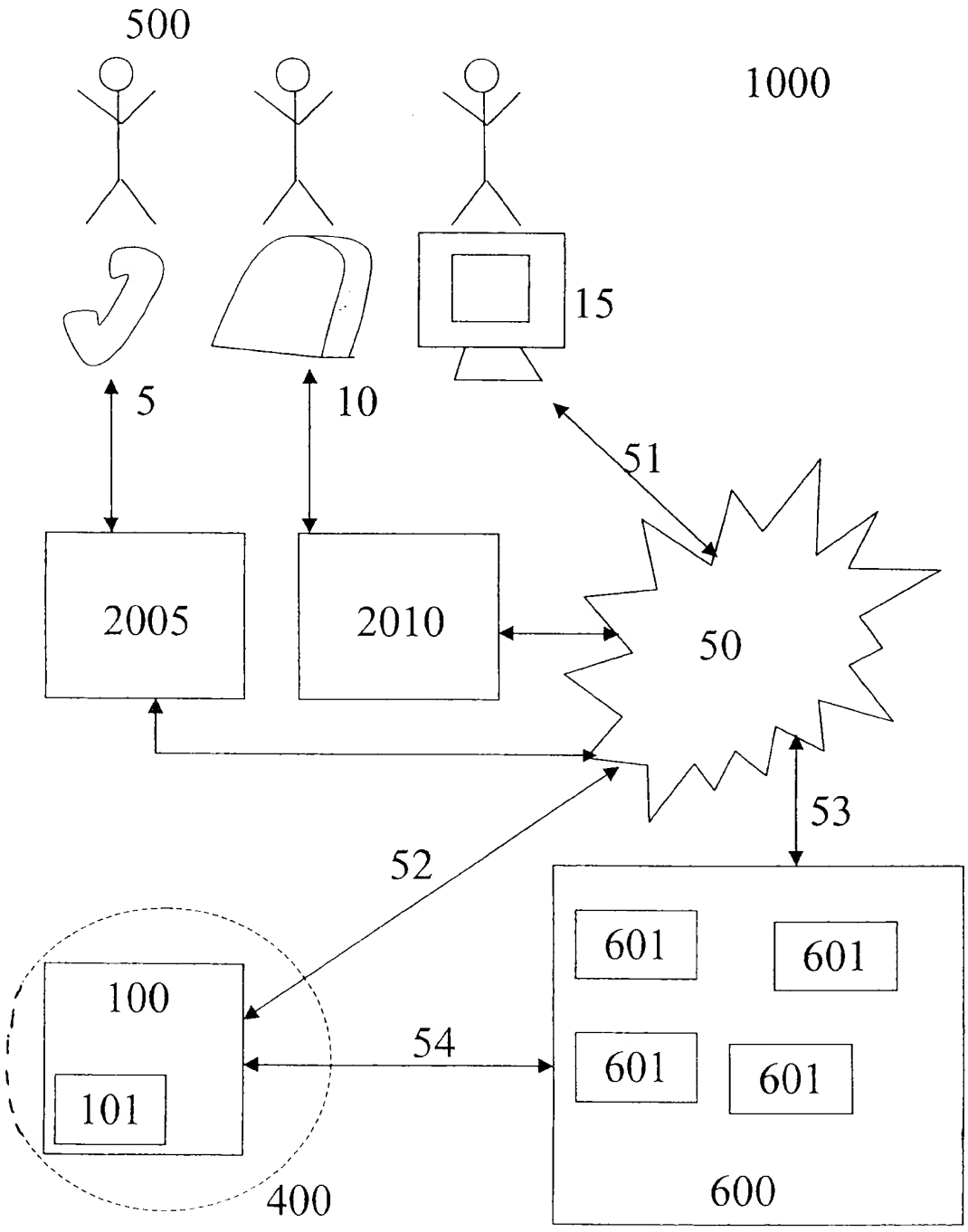

500
1000
15
5
10
51
2005
2010
50
53
52
601
601
601
601
100
101
54
400
600

Fig. 1A

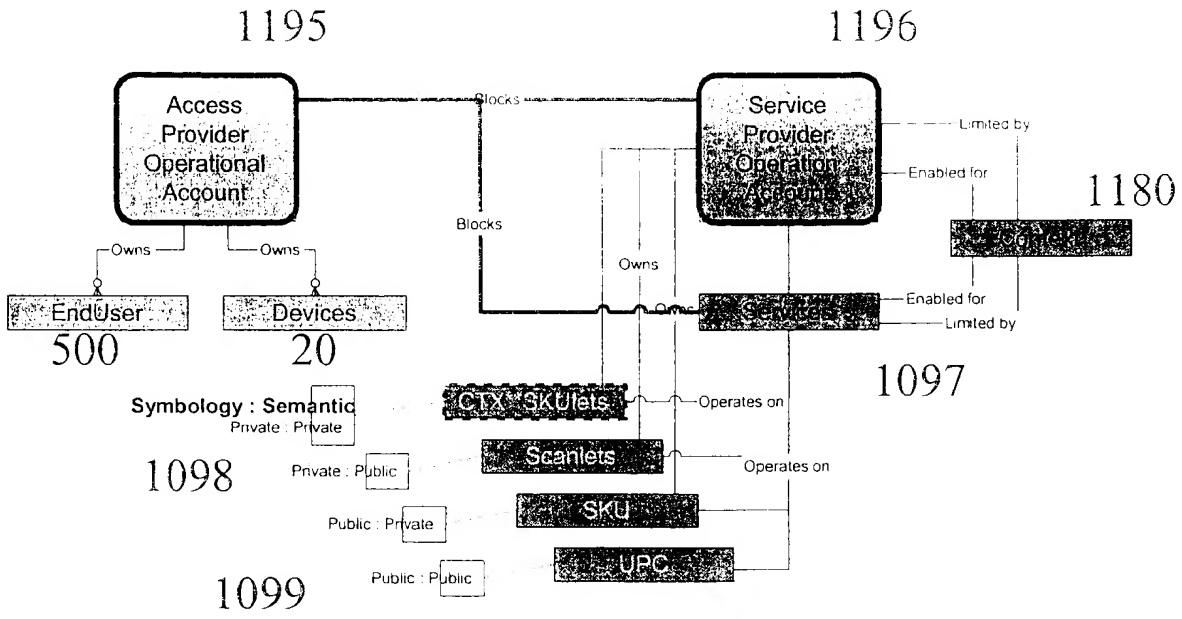
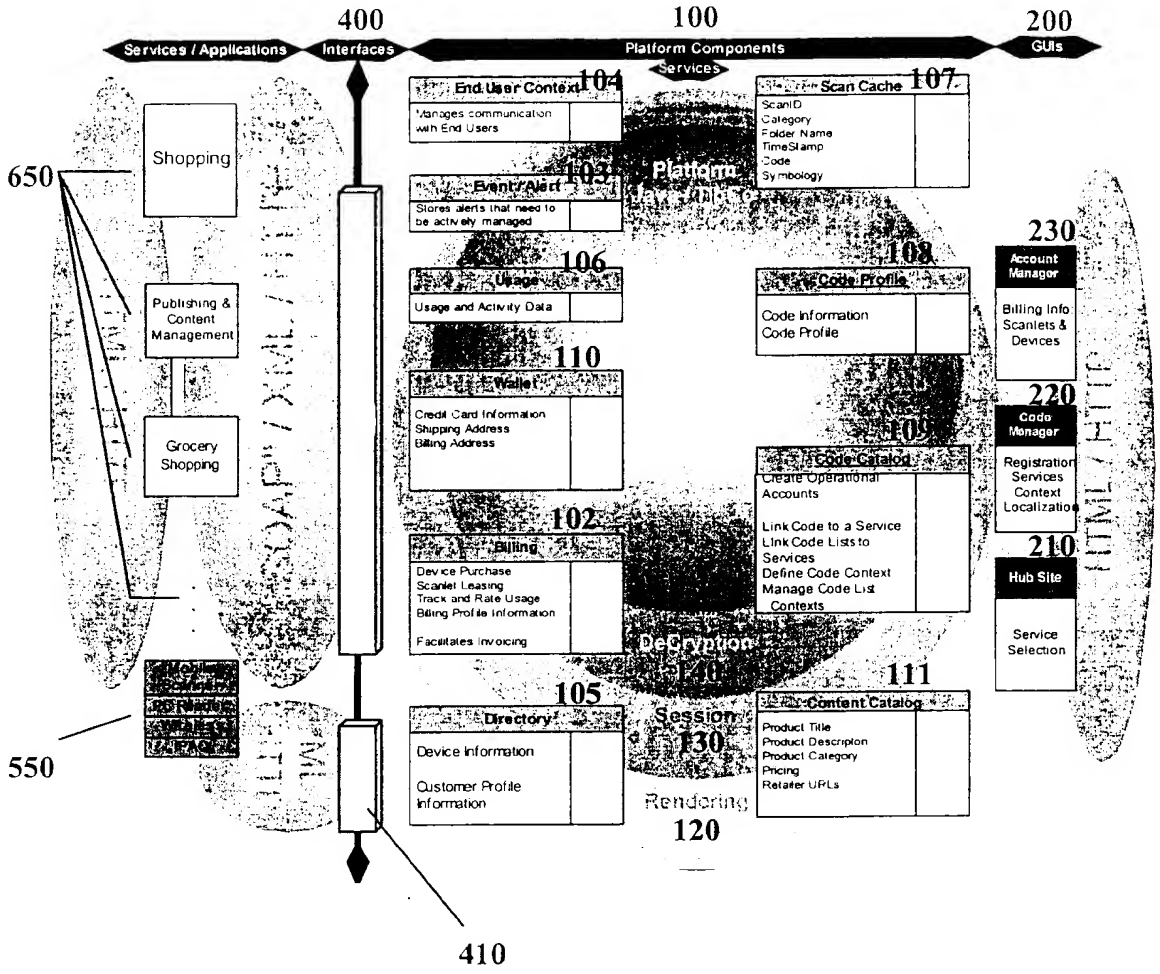

1195
1196
Access Provider Operational Account
Blocks
Service Provider Operation Account
Limited by
Enabled for
1180
Blocks
Owns
Owns
Owns
EndUser
Devices
Services
Enabled for
Limited by
500
20
1097
Symbology : Semantic
Private : Private
CTX SKUlets
Operates on
1098
Private : Public
Scanlets
Operates on
Public : Private
SKU
UPC
Public : Public
1099

Fig. 1B


400
100
200
Services / Applications
Interfaces
Platform Components
GUIs
Services
650
Shopping
Publishing & Content Management
Grocery Shopping
End User Context
104
Manages communication with End Users
Event/Alert
103
Stores alerts that need to be actively managed
Usage
106
Usage and Activity Data
Wallet
110
Credit Card Information
Shipping Address
Billing Address
Billing
102
Device Purchase
Scanlet Leasing
Track and Rate Usage
Billing Profile Information
Facilitates Invoicing
Directory
105
Device Information
Customer Profile Information
Platform
Scan Cache
107
ScanID
Category
Folder Name
TimeStamp
Code
Symbology
Code Profile
108
Code Information
Code Profile
Code Catalog
109
Create Operational Accounts
Link Code to a Service
Link Code Lists to Services
Define Code Context
Manage Code List Contexts
DeCryption
140
Content Catalog
111
Product Title
Product Description
Product Category
Pricing
Retailer URLs
Session
130
Rendering
120
230
Account Manager
Billing Info
Scanlets & Devices
220
Code Manager
Registration
Services
Context
Localization
210
Hub Site
Service Selection
550
410

1000

Fig. 2A

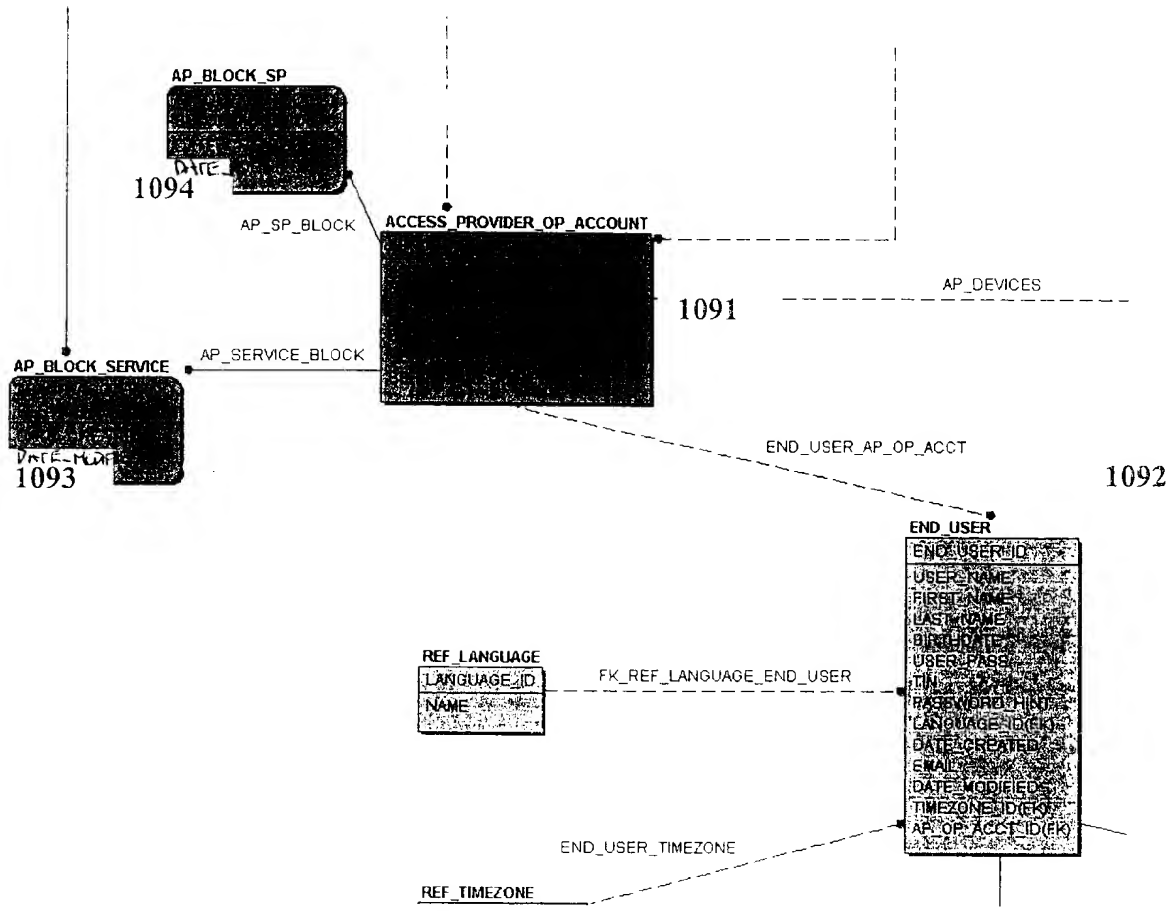

AP_BLOCK_SP
1094
AP_SP_BLOCK
ACCESS_PROVIDER_OP_ACCOUNT
1091
AP_DEVICES
AP_BLOCK_SERVICE
AP_SERVICE_BLOCK
1093
END_USER_AP_OP_ACCT
1092
END_USER
REF_LANGUAGE
LANGUAGE_ID
NAME
FK_REF_LANGUAGE_END_USER
END_USER_TIMEZONE
REF_TIMEZONE

Fig. 2B

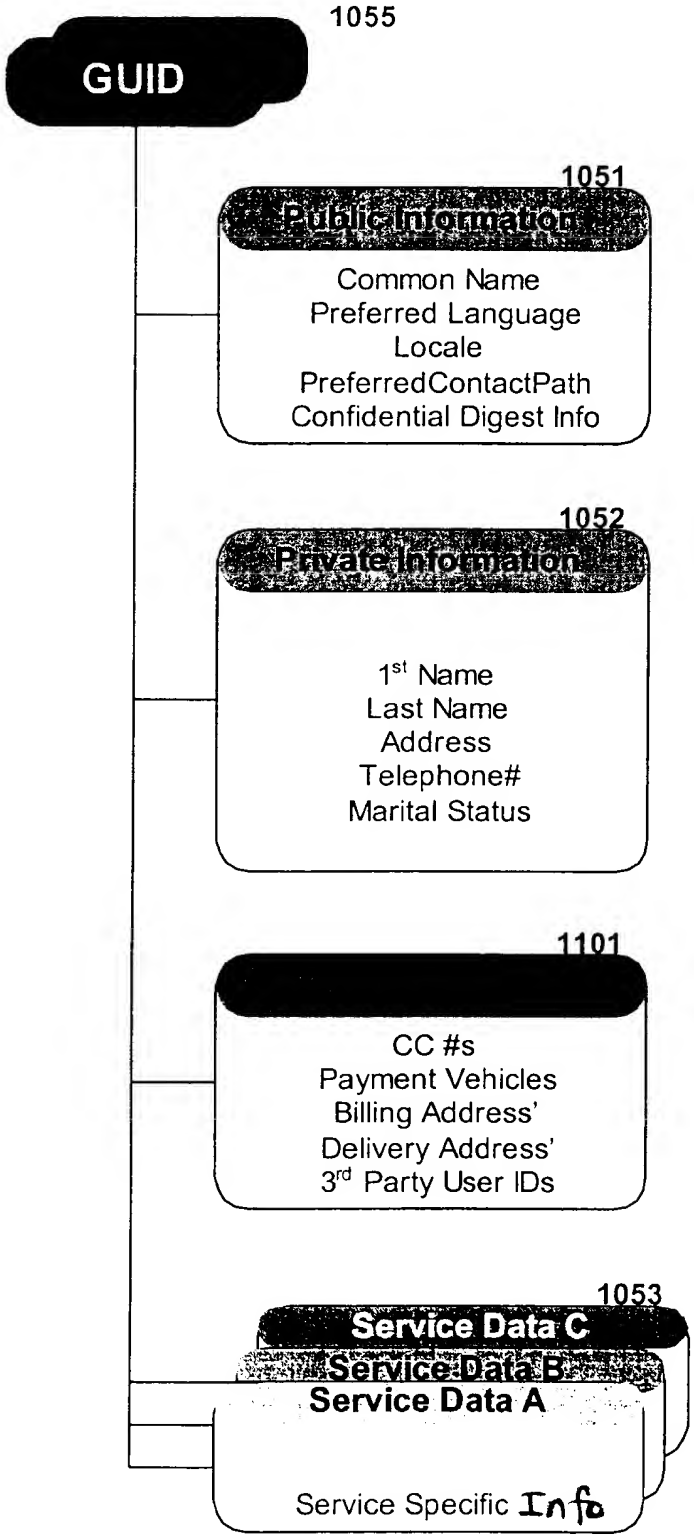

1055
GUID
1051
Public Information
Common Name
Preferred Language
Locale
PreferredContactPath
Confidential Digest Info
1052
Private Information
1st Name
Last Name
Address
Telephone#
Marital Status
1101
CC #s
Payment Vehicles
Billing Address'
Delivery Address'
3rd Party User IDs
1053
Service Data C
Service Data B
Service Data A
Service Specific Info

Fig. 3

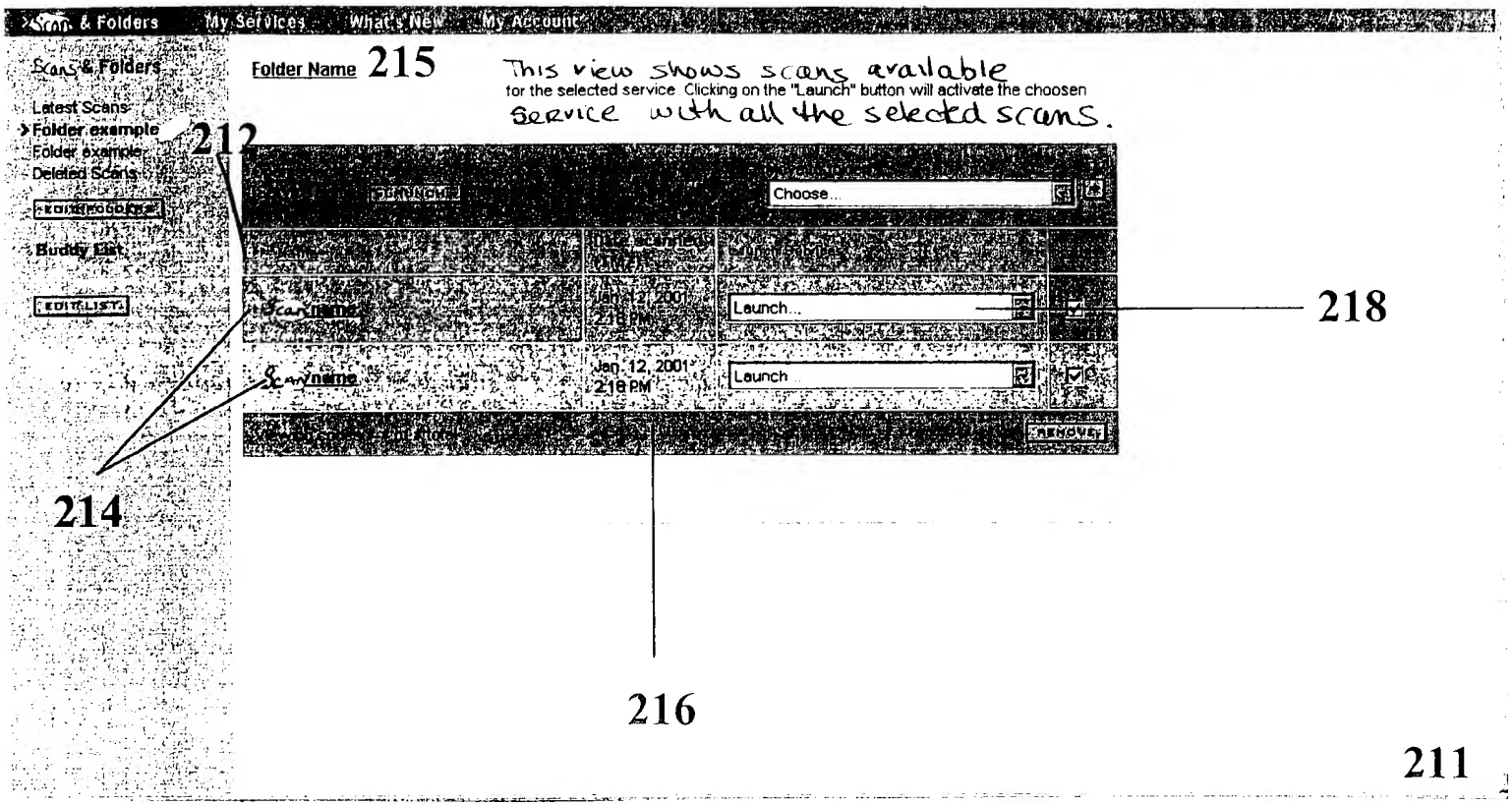

& Folders
My Services
What's New
My Account
Scans & Folders
Latest Scans
Folder example
Folder example
Deleted Scans
EDIT LIST
Buddy List
EDIT LIST
Folder Name 215
This view shows scans available
for the selected service. Clicking on the "Launch" button will activate the choosen
service with all the selected scans.
212
Choose...
Launch...
Launch
Jan 12, 2001
218 PM
218
214
216
211

Fig. 4A

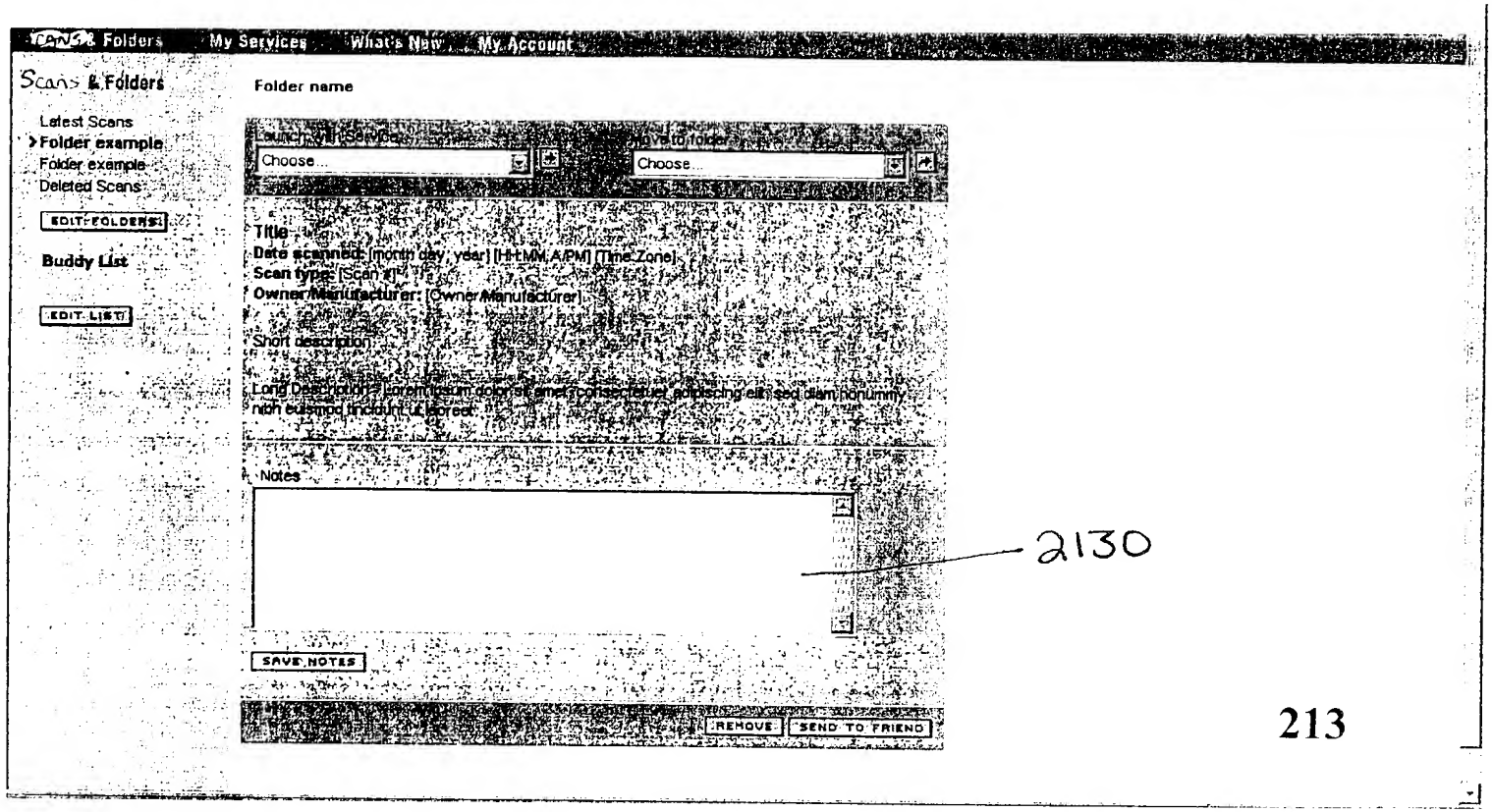

Folders
My Services
What's New
My Account
Scans & Folders
Folder name
Latest Scans
Folder example
Folder example
Deleted Scans
EDIT FOLDERS
Buddy List
EDIT LIST
Choose...
Choose...
Title
Date scanned: [month day, year] [HH:MM A/PM] [Time Zone]
Scan type: [scan #]
Owner/Manufacturer: [Owner/Manufacturer]
Short description
Notes
2130
SAVE NOTES
REMOVE
SEND TO FRIEND
213

Fig. 4B

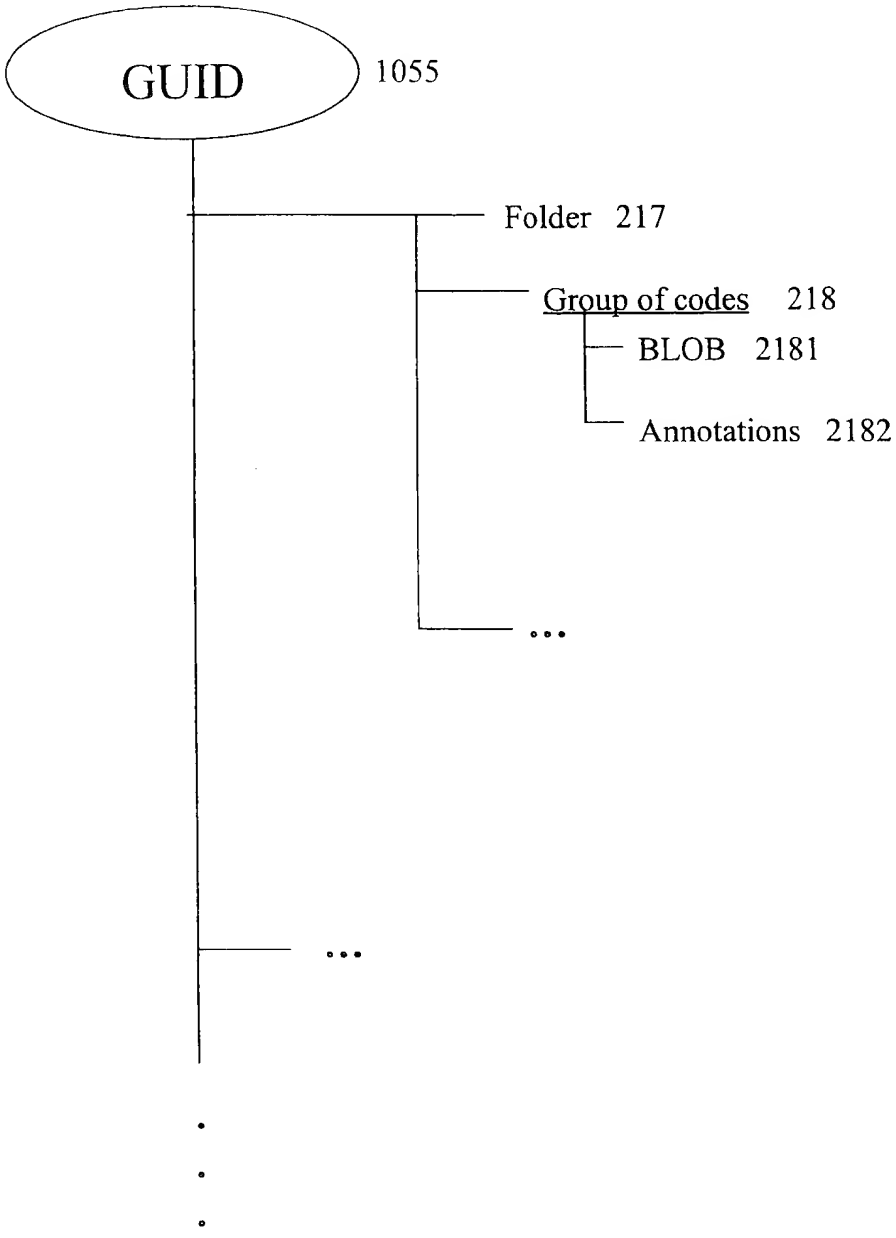

GUID
1055
Folder 217
Group of codes 218
BLOB 2181
Annotations 2182
...
...

**Fig. 4C**

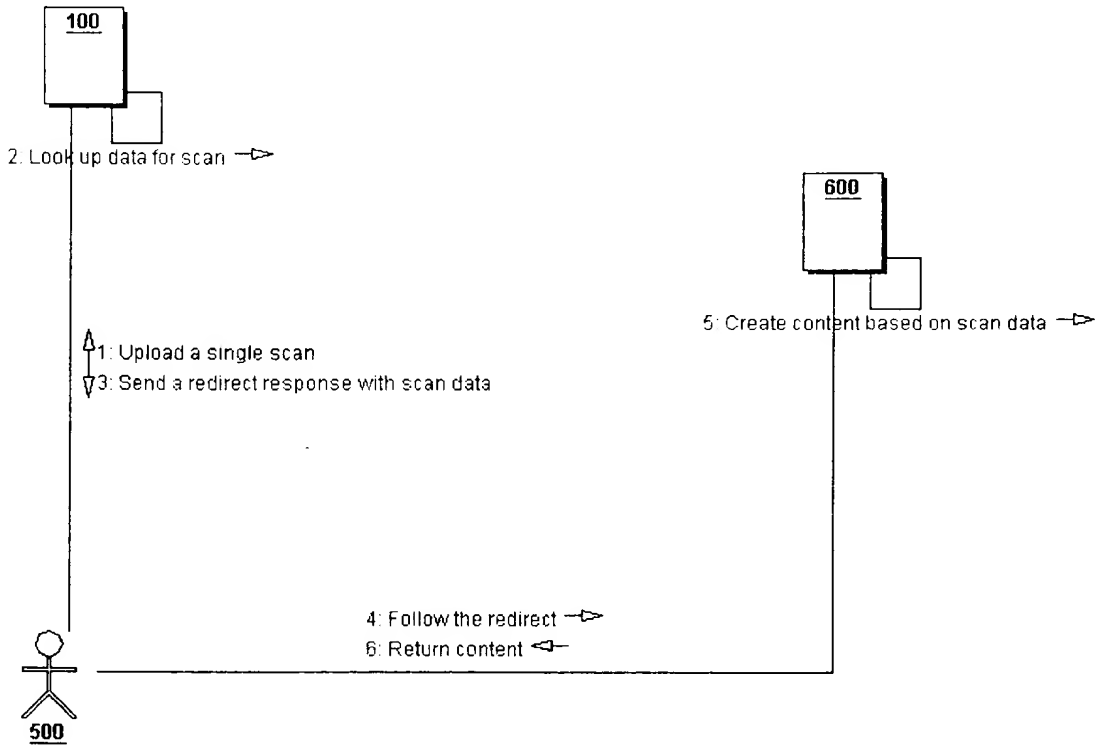

100
2. Look up data for scan
600
5: Create content based on scan data
1: Upload a single scan
3: Send a redirect response with scan data
4: Follow the redirect
6: Return content
500

Fig. 5A

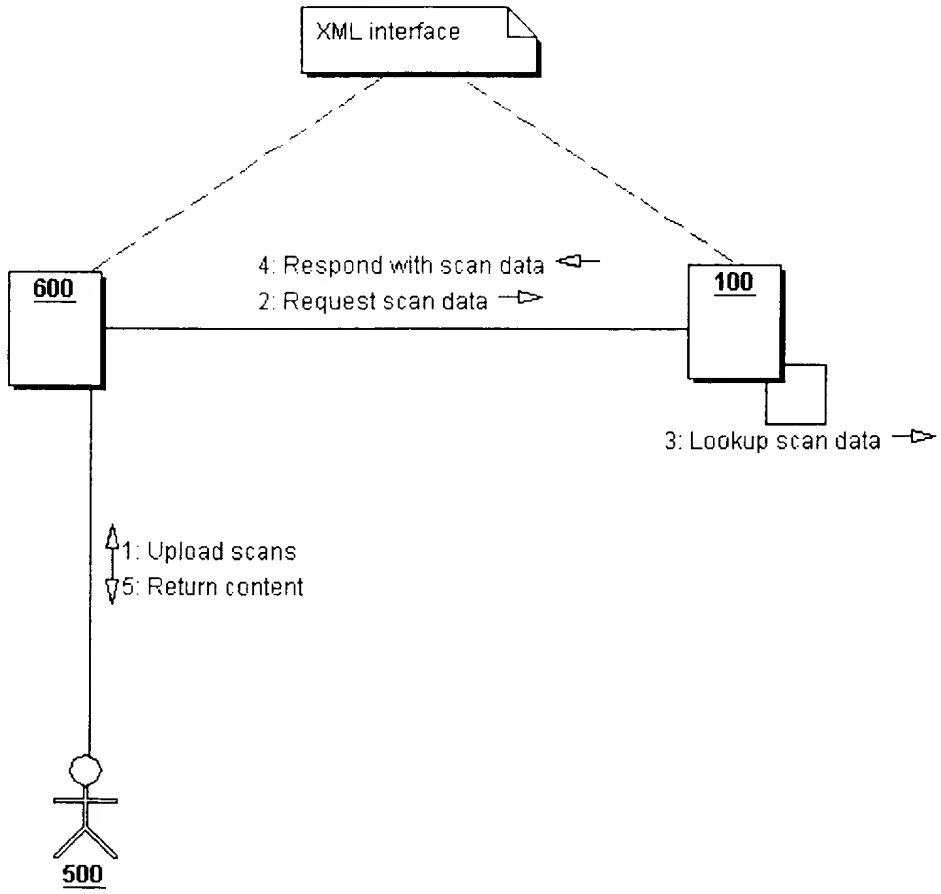

XML interface
600
100
4: Respond with scan data
2: Request scan data
3: Lookup scan data
1: Upload scans
5: Return content
500

Fig. 5B

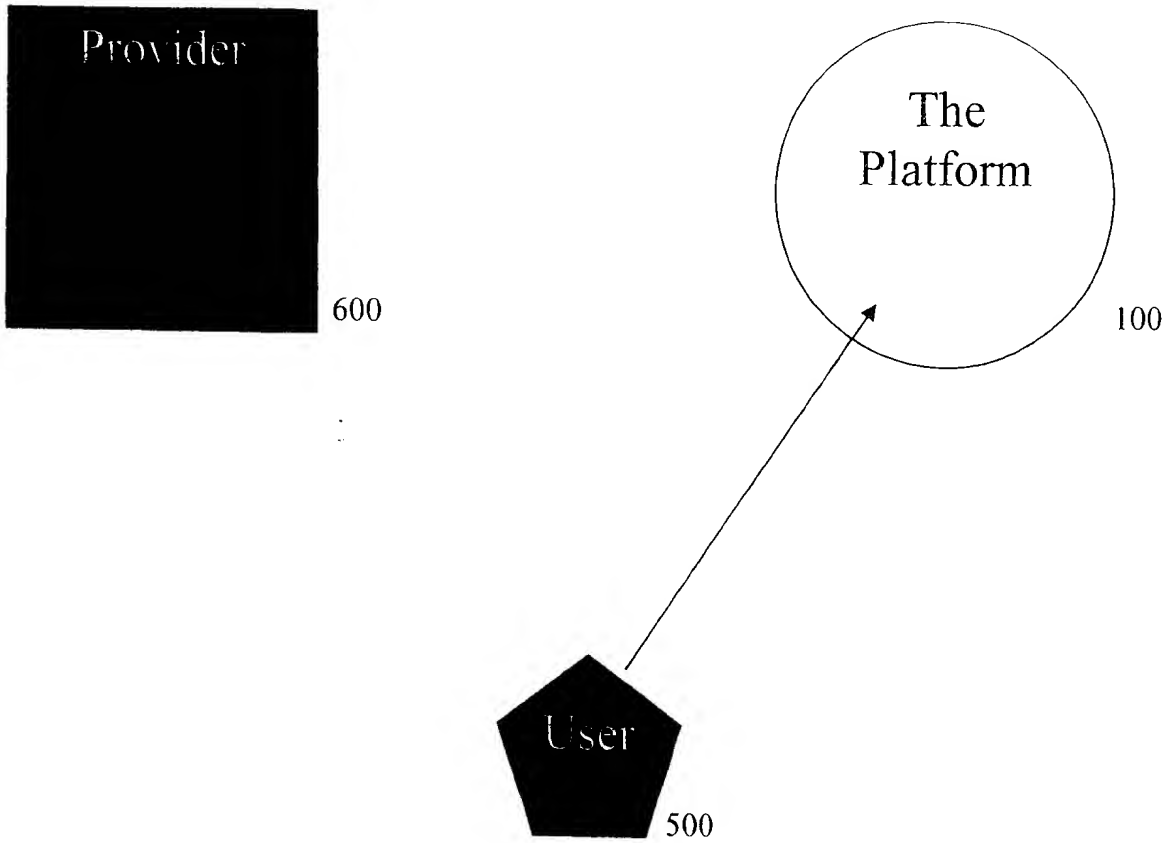



Fig. 6A

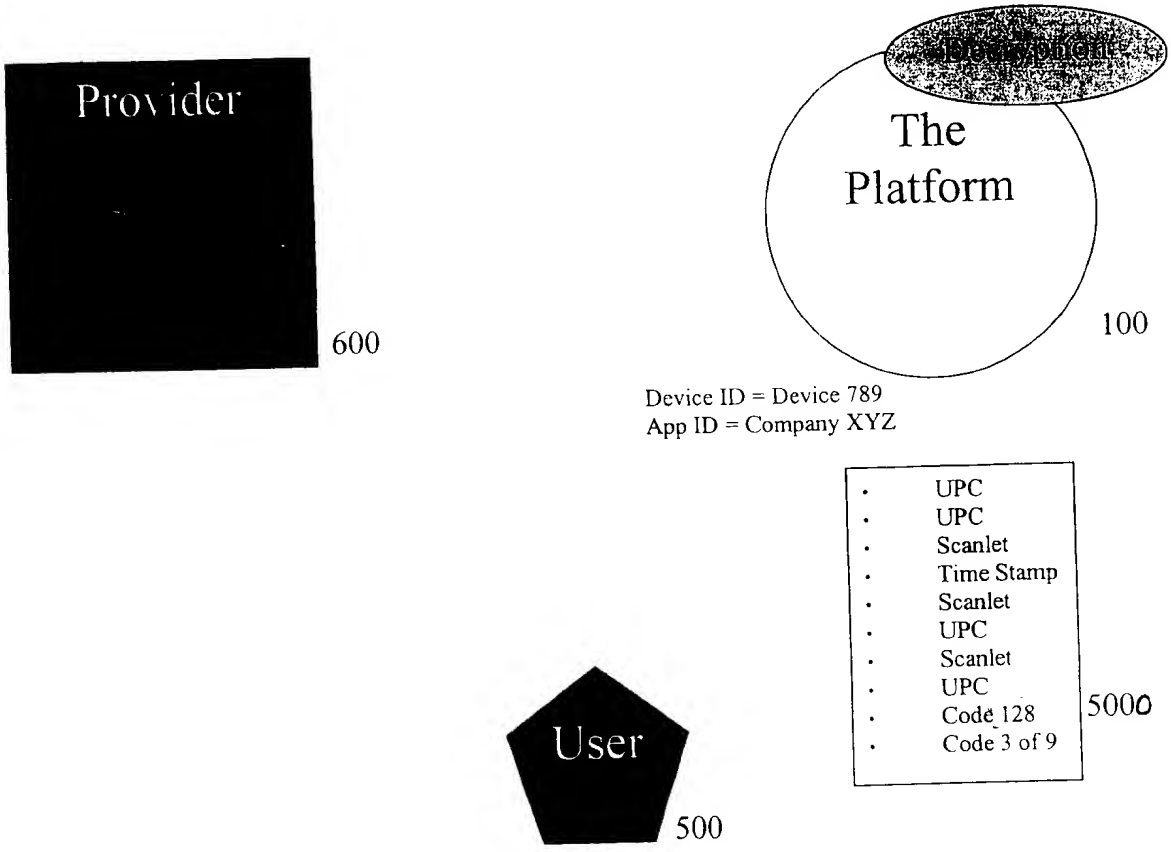

Provider
600
The Platform
100
Device ID = Device 789
App ID = Company XYZ
UPC
UPC
Scanlet
Time Stamp
Scanlet
UPC
Scanlet
UPC
Code 128
Code 3 of 9
5000
User
500

Fig. 6B

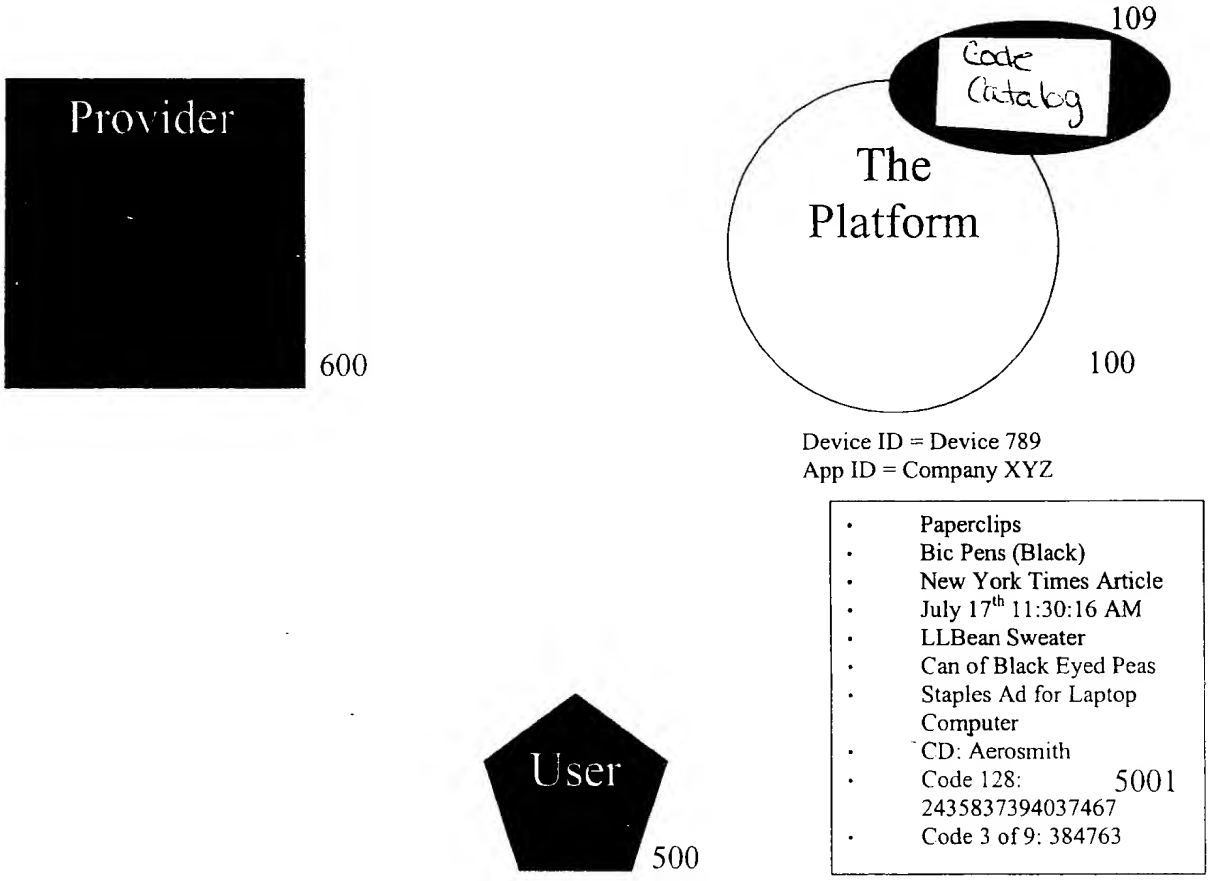

Provider
600
109
Code Catalog
The Platform
100
Device ID = Device 789
App ID = Company XYZ
Paperclips
Bic Pens (Black)
New York Times Article
July 17th 11:30:16 AM
LLBean Sweater
Can of Black Eyed Peas
Staples Ad for Laptop Computer
CD: Aerosmith
Code 128: 2435837394037467
5001
Code 3 of 9: 384763
User
500

Fig. 6C

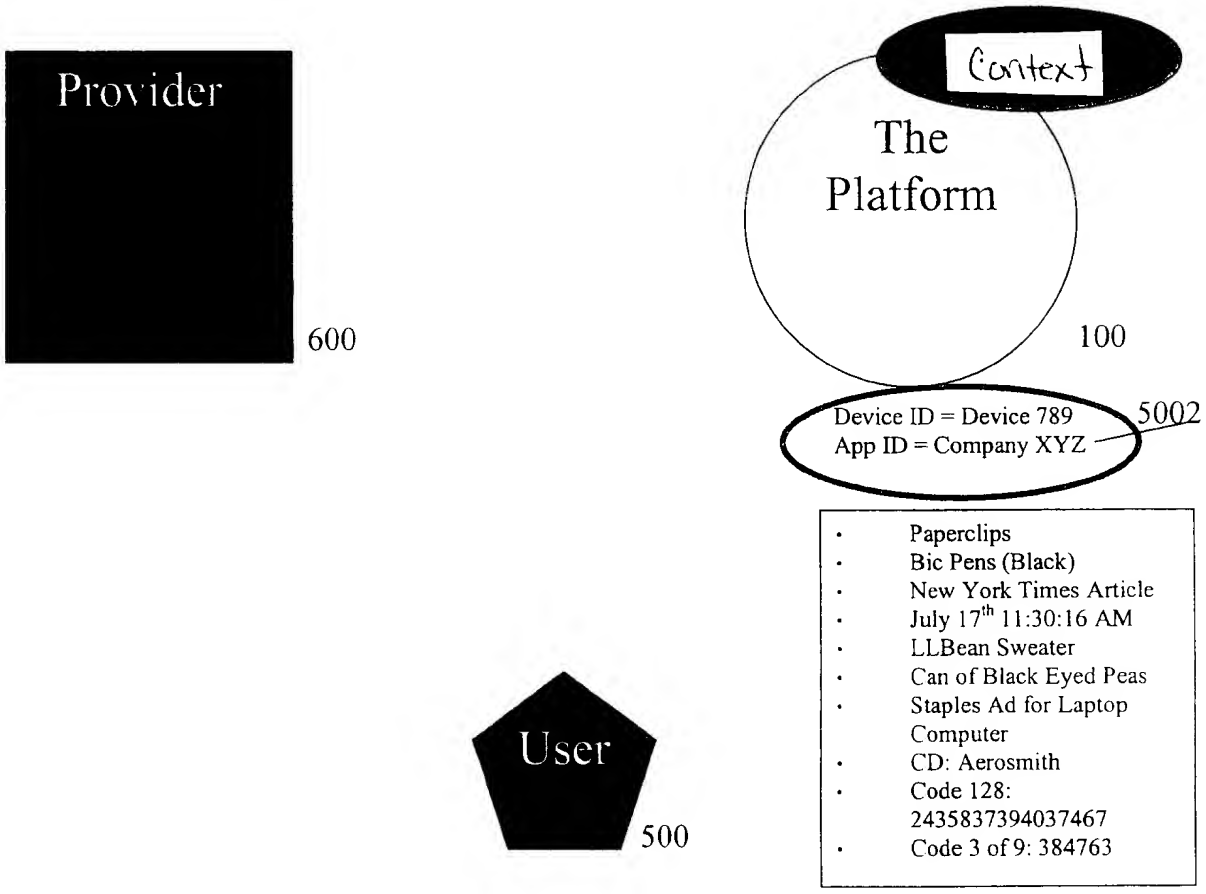

Provider
600
Context
The Platform
100
Device ID = Device 789
App ID = Company XYZ
5002
User
500
Paperclips
Bic Pens (Black)
New York Times Article
July 17th 11:30:16 AM
LLBean Sweater
Can of Black Eyed Peas
Staples Ad for Laptop Computer
CD: Aerosmith
Code 128: 2435837394037467
Code 3 of 9: 384763

Fig. 6D

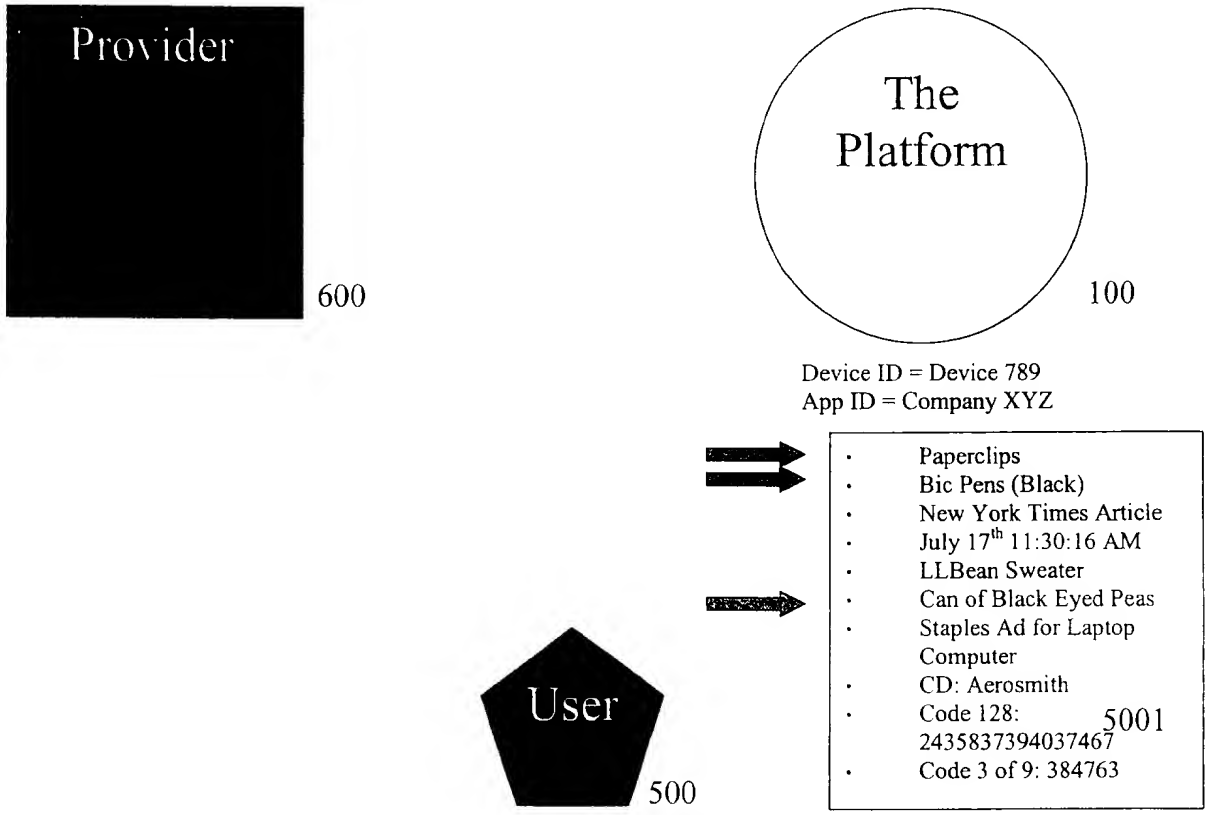

Provider
600
The Platform
100
Device ID = Device 789
App ID = Company XYZ
Paperclips
Bic Pens (Black)
New York Times Article
July 17th 11:30:16 AM
LLBean Sweater
Can of Black Eyed Peas
Staples Ad for Laptop Computer
CD: Aerosmith
Code 128: 2435837394037467
Code 3 of 9: 384763
5001
User
500

Fig. 6E

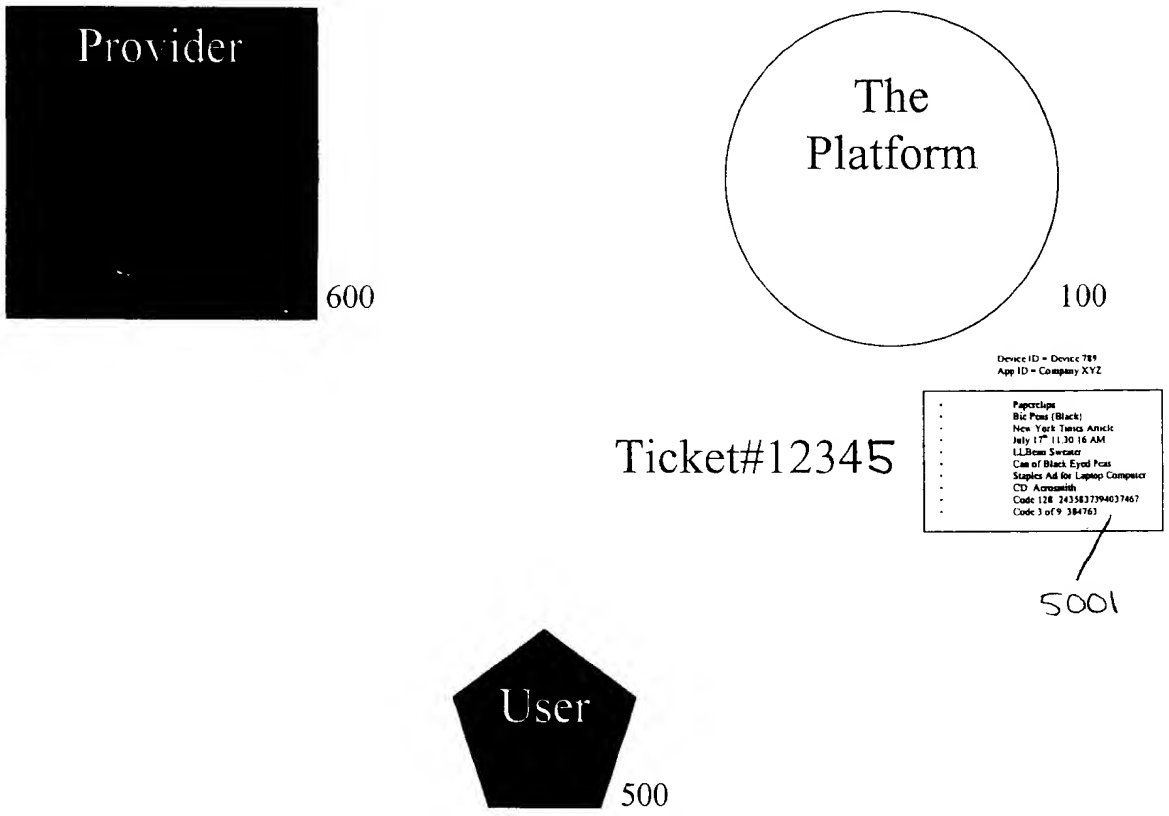

Provider
600
The Platform
100
Device ID = Device 789
App ID = Company XYZ
Ticket#12345
Paperclips
Bic Pens (Black)
New York Times Article
July 17th 11:30:16 AM
LLBean Sweater
Can of Black Eyed Peas
Staples Ad for Laptop Computer
CD Accusmith
Code 128: 24358373940637467
Code 3 of 9: 384763
5001
User
500

Fig. 6F

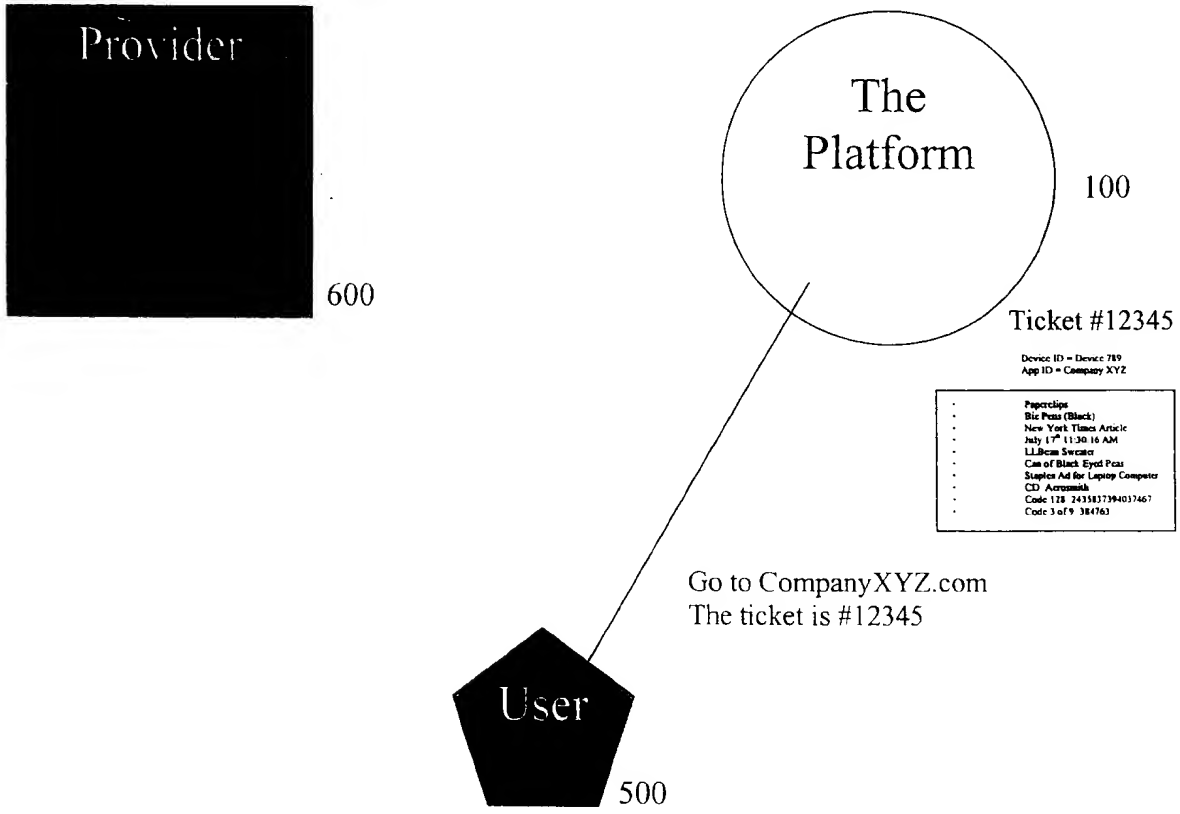

Provider
600
The Platform
100
Ticket #12345
Device ID = Device 789
App ID = Company XYZ
Paperclips
Bic Pens (Black)
New York Times Article
July 17th 11:30:16 AM
LLBean Sweater
Can of Black Eyed Peas
Staples Ad for Laptop Computer
CD Aerosmith
Code 128 2435837394037467
Code 3 of 9 384763
Go to CompanyXYZ.com
The ticket is #12345
User
500

Fig. 6G

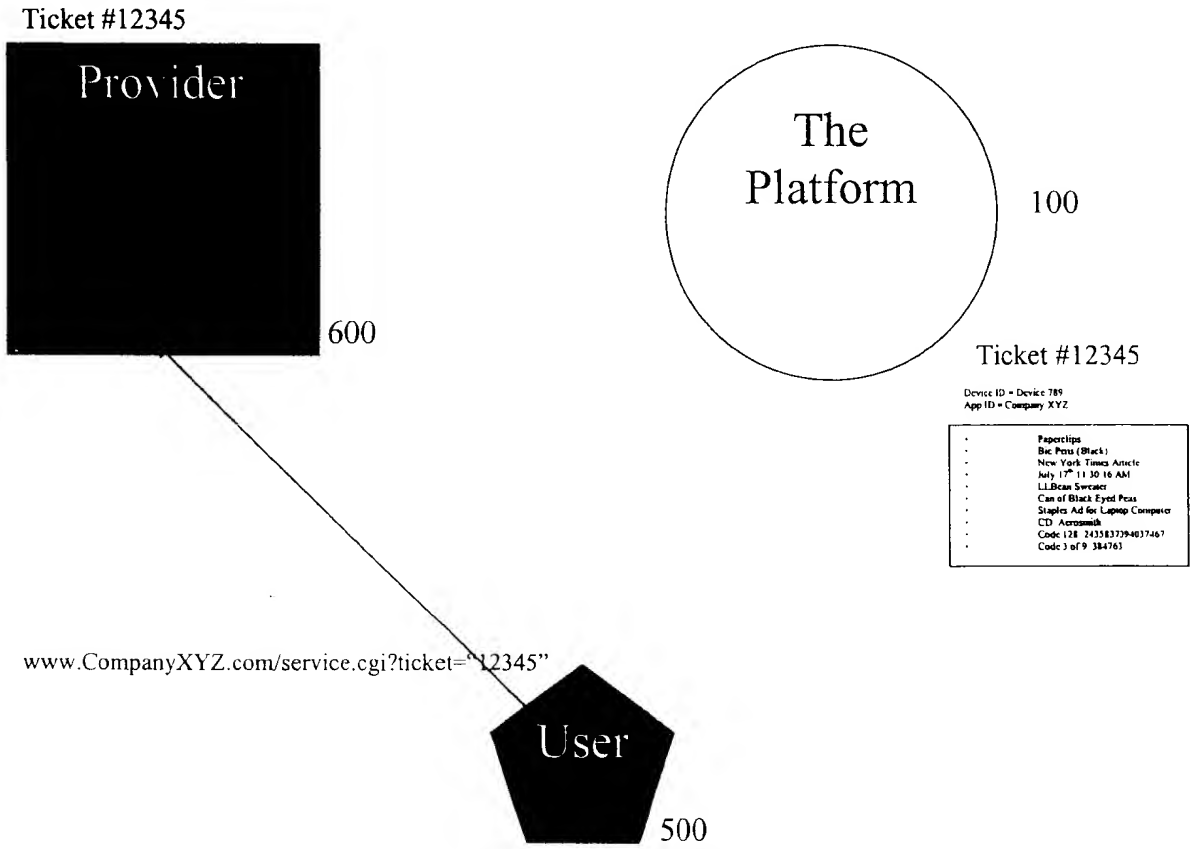

Ticket #12345
Provider
600
The Platform
100
Ticket #12345
Device ID = Device 789
App ID = Company XYZ
Paperclips
Bic Pens (Black)
New York Times Article
July 17th 11 30 16 AM
L.L.Bean Sweater
Can of Black Eyed Peas
Staples Ad for Laptop Computer
CD Aerosmith
Code 128 2435837394037467
Code 3 of 9 384763
www.CompanyXYZ.com/service.cgi?ticket="12345"
User
500

Fig. 6H

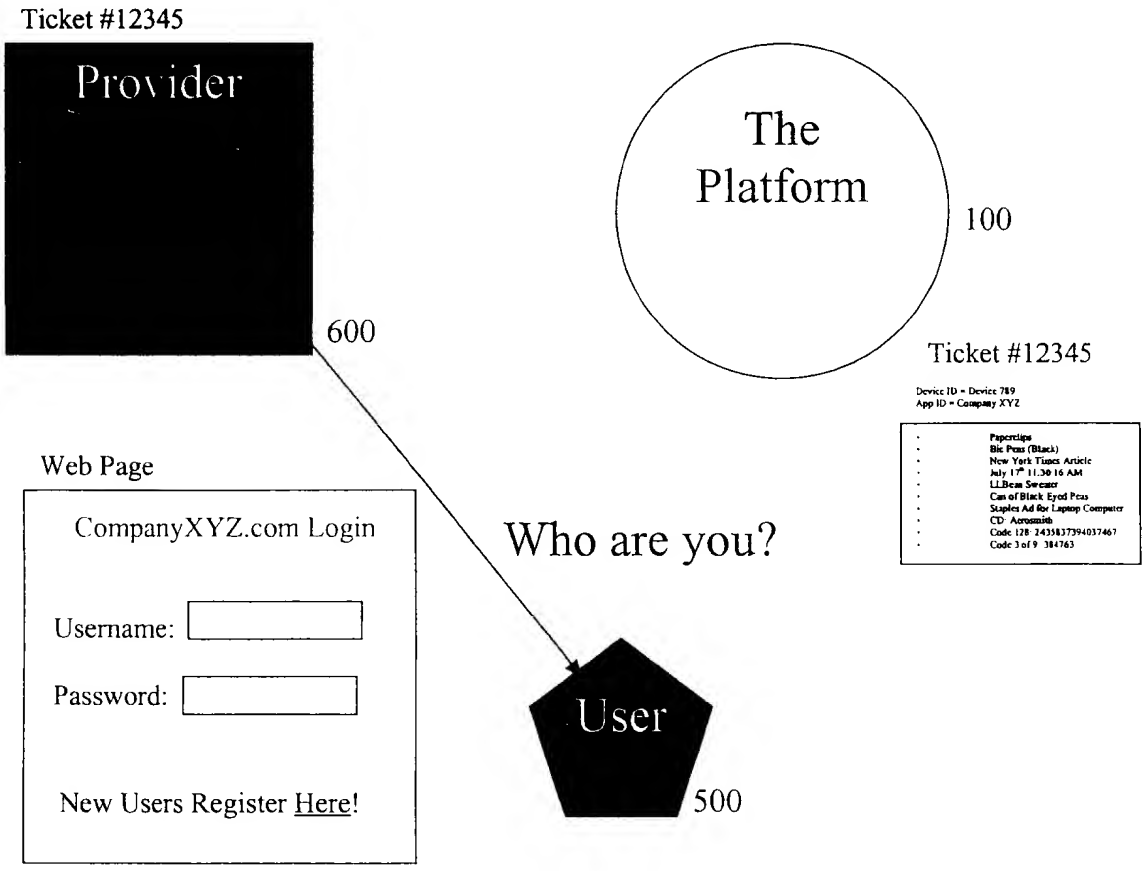

Ticket #12345
Provider
600
The Platform
100
Ticket #12345
Device ID = Device 789
App ID = Company XYZ
Paperclips
Bic Pens (Black)
New York Times Article
July 17th 11:30:16 AM
LL.Bean Sweater
Can of Black Eyed Peas
Staples Ad for Laptop Computer
CD: Aerosmith
Code 128: 2435837394037467
Code 3 of 9: 384763
Web Page
CompanyXYZ.com Login
Username:
Password:
New Users Register Here!
Who are you?
User
500

Fig. 6I

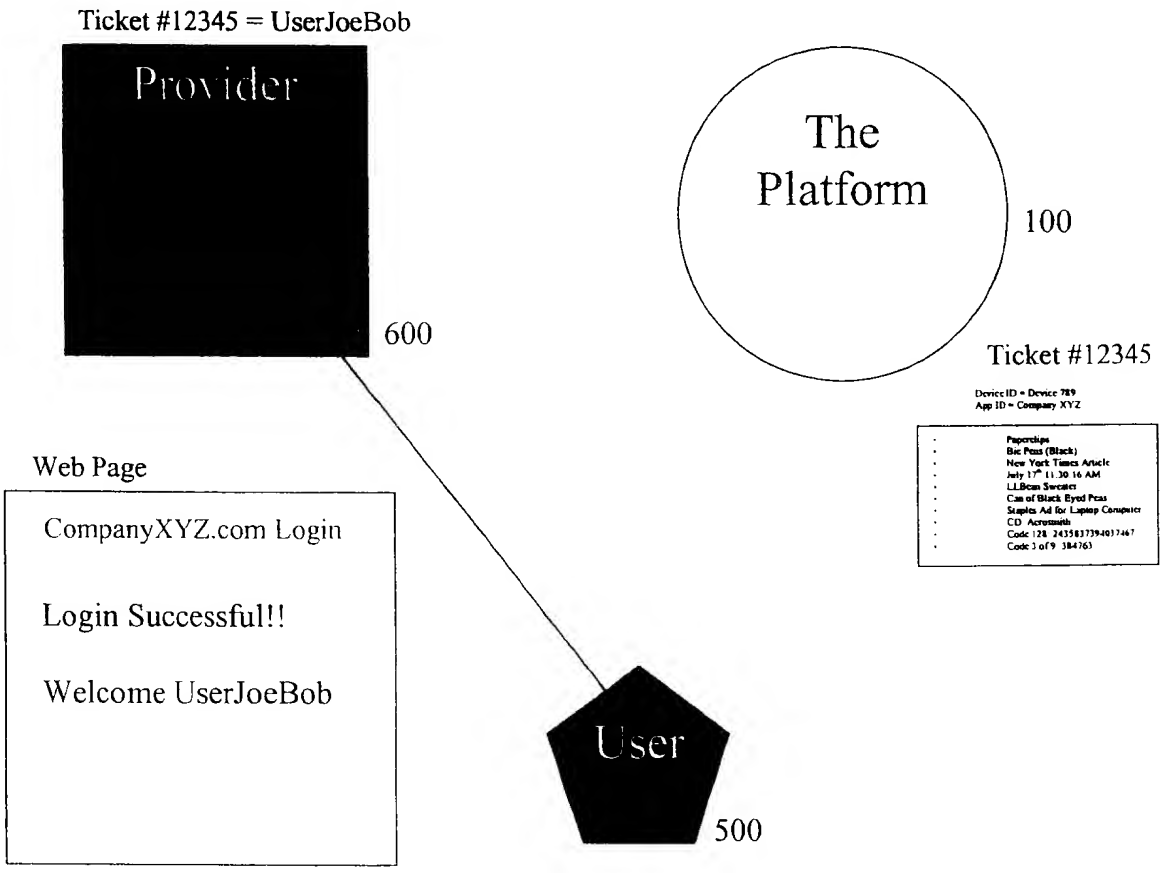

Ticket #12345 = UserJoeBob
Provider
600
The Platform
100
Ticket #12345
Device ID = Device 789
App ID = Company XYZ
Paperclips
Bic Pens (Black)
New York Times Article
July 17th 11 30 16 AM
LLBean Sweater
Can of Black Eyed Peas
Staples Ad for Laptop Computer
CD Acrosmith
Code 128 2435837394017467
Code 3 of 9 384763
Web Page
CompanyXYZ.com Login
Login Successful!!
Welcome UserJoeBob
User
500

Fig. 6J

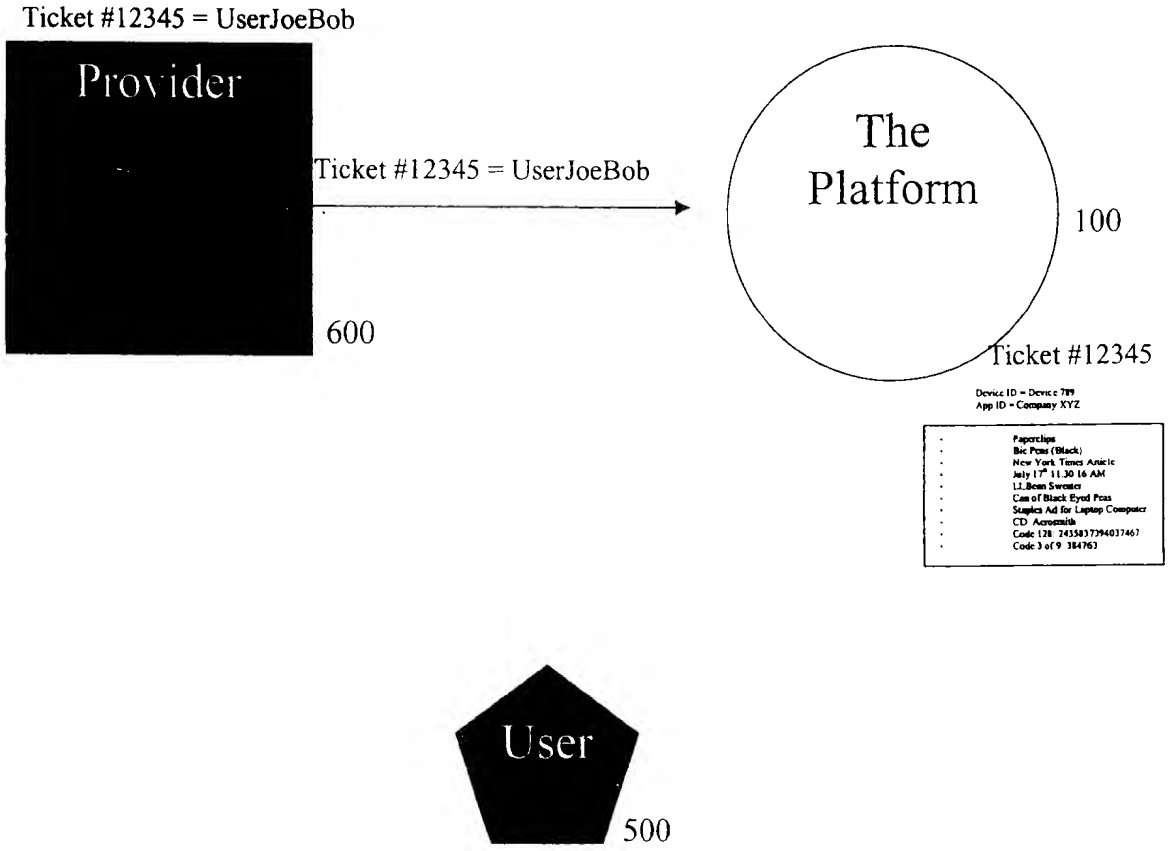

Ticket #12345 = UserJoeBob
Provider
600
Ticket #12345 = UserJoeBob
The Platform
100
Ticket #12345
Device ID = Device 789
App ID = Company XYZ
Paperclips
Bic Pens (Black)
New York Times Article
July 17th 11.30 16 AM
LL.Bean Sweater
Can of Black Eyed Peas
Staples Ad for Laptop Computer
CD Aerosmith
Code 128 2458837794037467
Code 3 of 9 384763
User
500

Fig. 6K

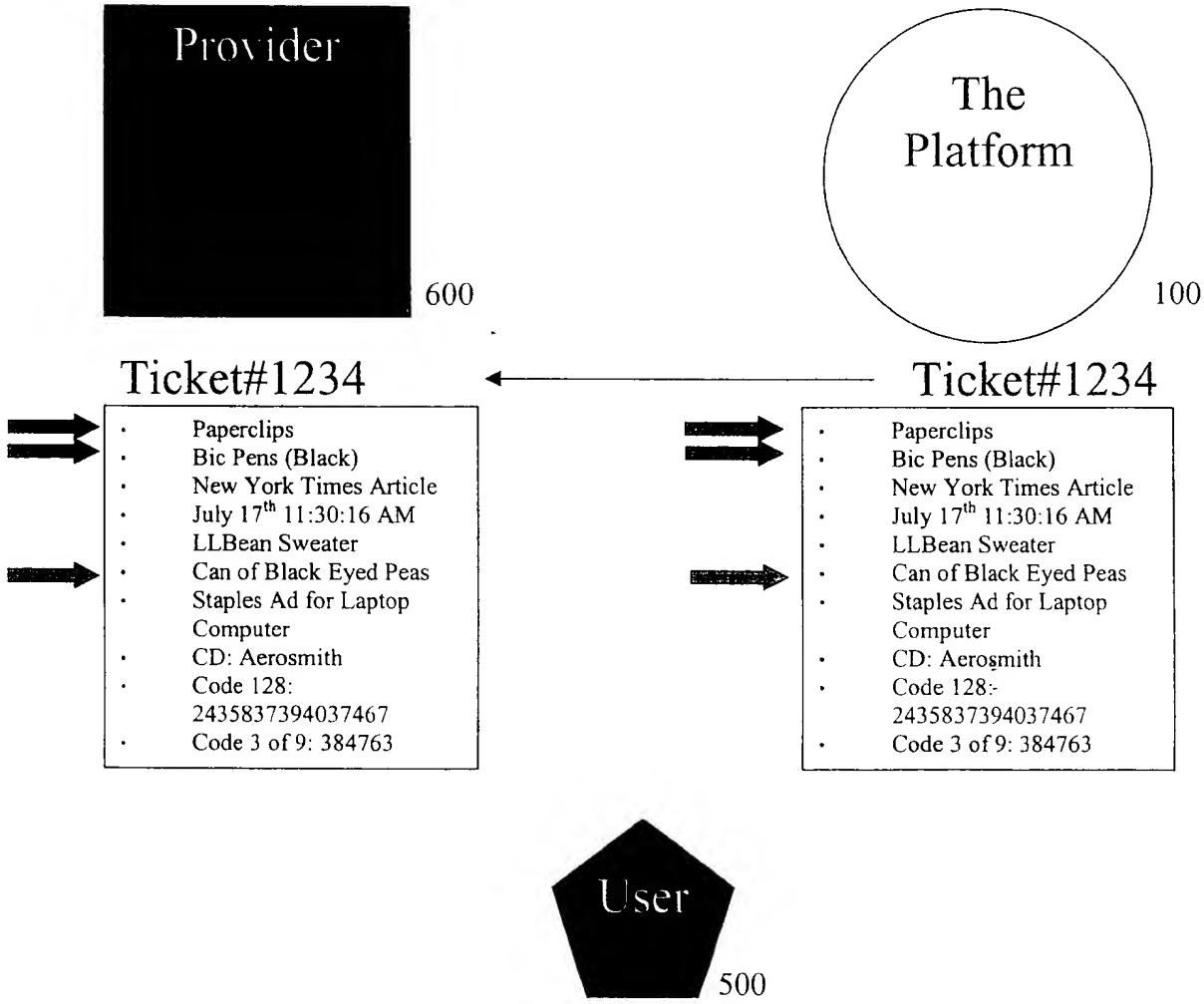

Provider
600
The Platform
100
Ticket#1234
Ticket#1234
Paperclips
Bic Pens (Black)
New York Times Article
July 17th 11:30:16 AM
LLBean Sweater
Can of Black Eyed Peas
Staples Ad for Laptop Computer
CD: Aerosmith
Code 128: 2435837394037467
Code 3 of 9: 384763
Paperclips
Bic Pens (Black)
New York Times Article
July 17th 11:30:16 AM
LLBean Sweater
Can of Black Eyed Peas
Staples Ad for Laptop Computer
CD: Aerosmith
Code 128: 2435837394037467
Code 3 of 9: 384763
User
500

Fig. 6L

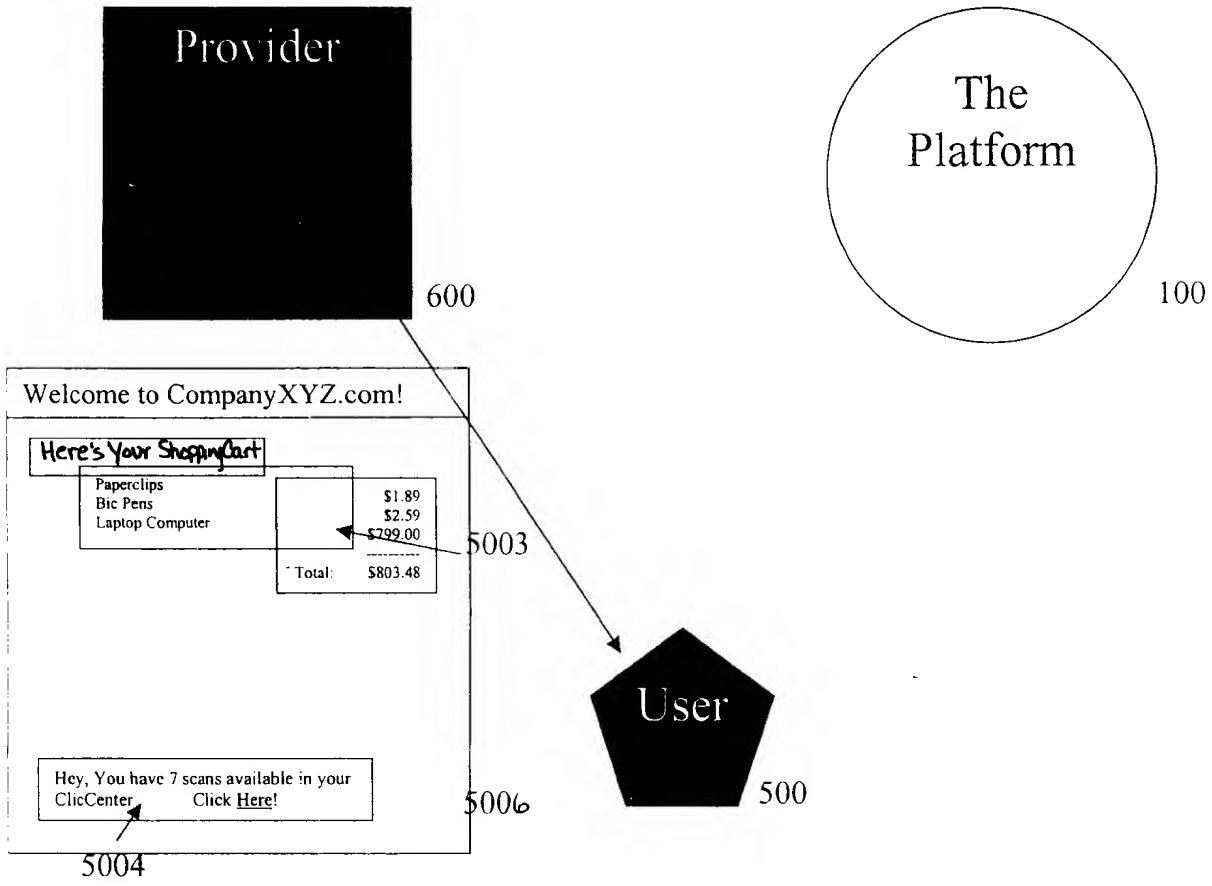

Provider
600
The Platform
100
Welcome to CompanyXYZ.com!
Here's Your ShoppingCart
Paperclips
Bic Pens
Laptop Computer
$1.89
$2.59
$799.00
Total: $803.48
5003
User
500
Hey, You have 7 scans available in your ClicCenter Click Here!
5006
5004

Fig. 6M

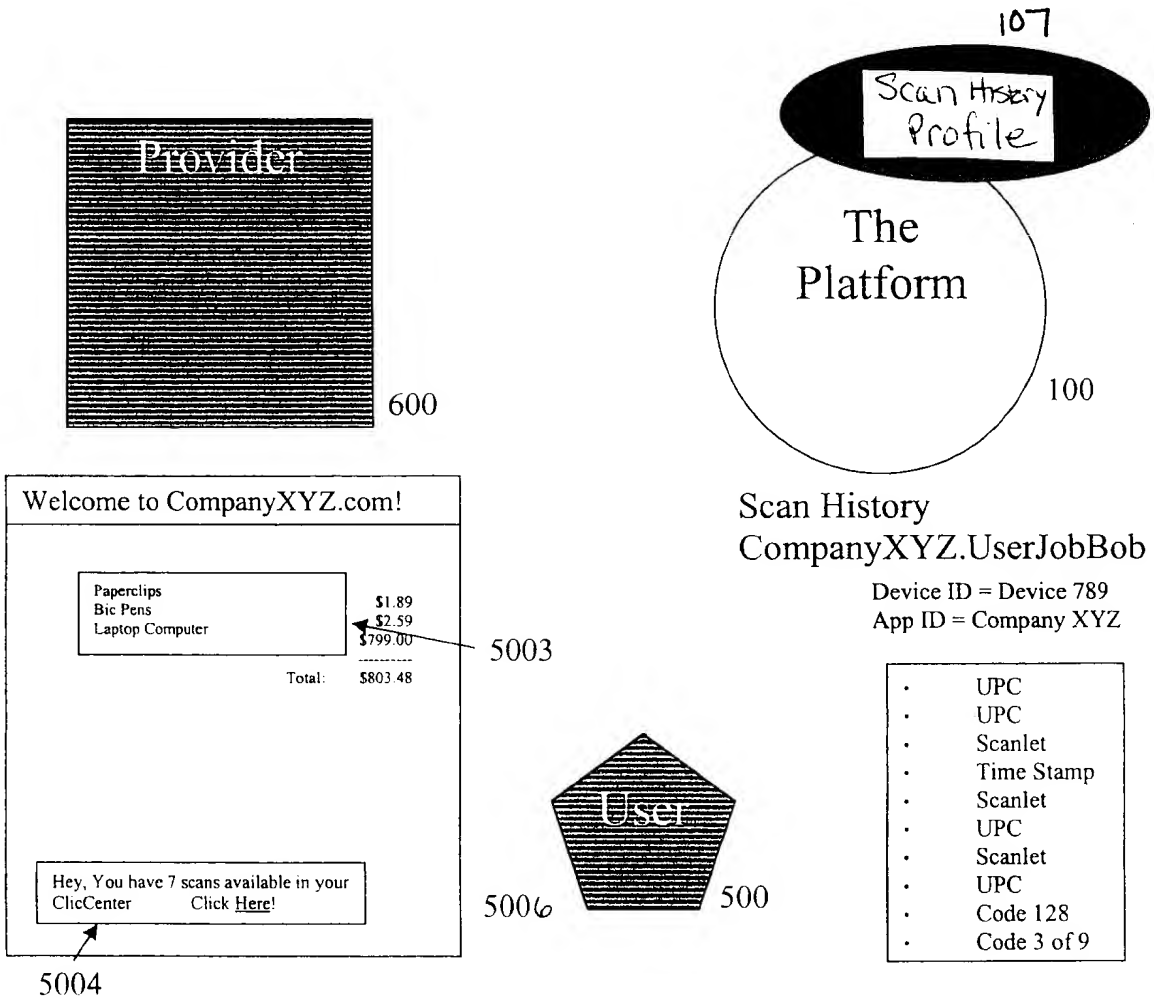

107
Scan History Profile
The Platform
100
Provider
600
Welcome to CompanyXYZ.com!
Paperclips
Bic Pens
Laptop Computer
$1.89
$2.59
$799.00
Total: $803.48
5003
Hey, You have 7 scans available in your ClicCenter Click Here!
5004
User
5006
500
Scan History
CompanyXYZ.UserJobBob
Device ID = Device 789
App ID = Company XYZ
UPC
UPC
Scanlet
Time Stamp
Scanlet
UPC
Scanlet
UPC
Code 128
Code 3 of 9

Fig. 6N

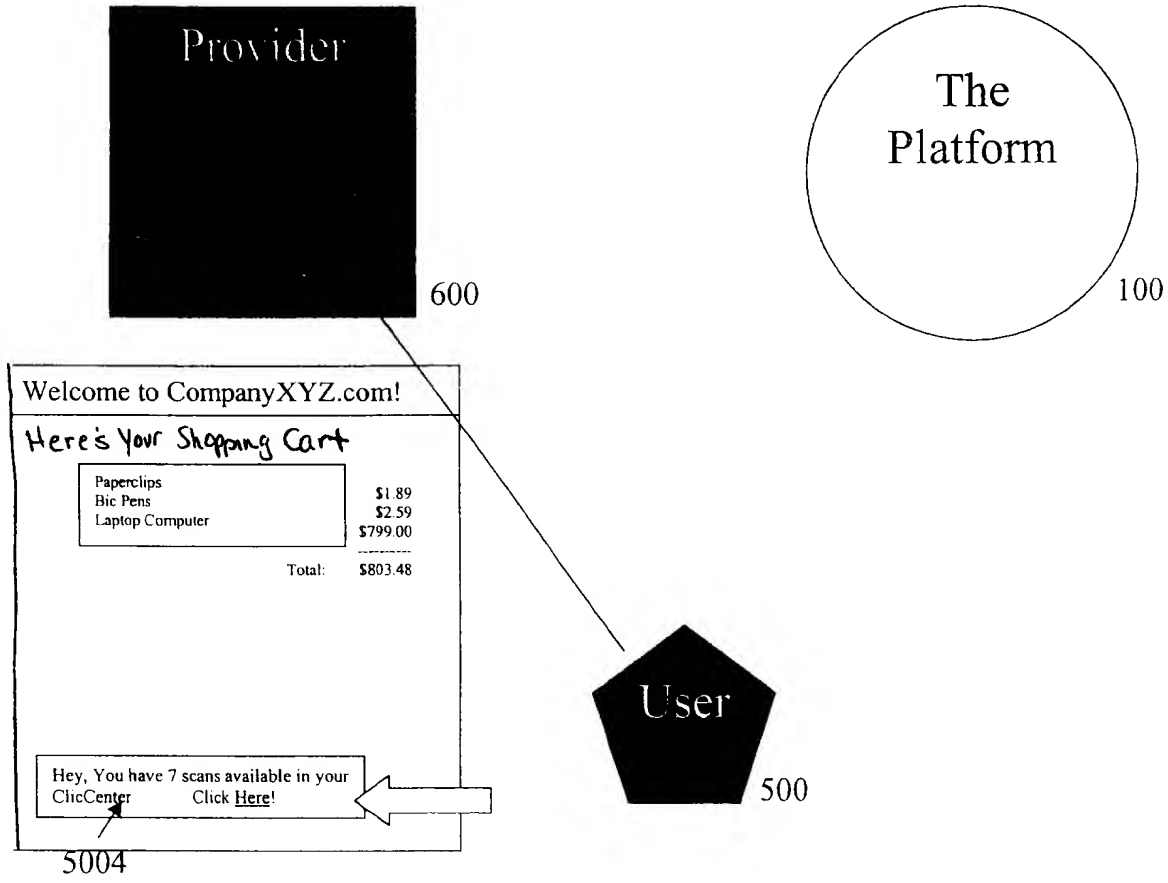

Provider
600
The Platform
100
Welcome to CompanyXYZ.com!
Here's Your Shopping Cart
Paperclips $1.89
Bic Pens $2.59
Laptop Computer $799.00
Total: $803.48
Hey, You have 7 scans available in your ClicCenter Click Here!
5004
User
500

Fig. 6O

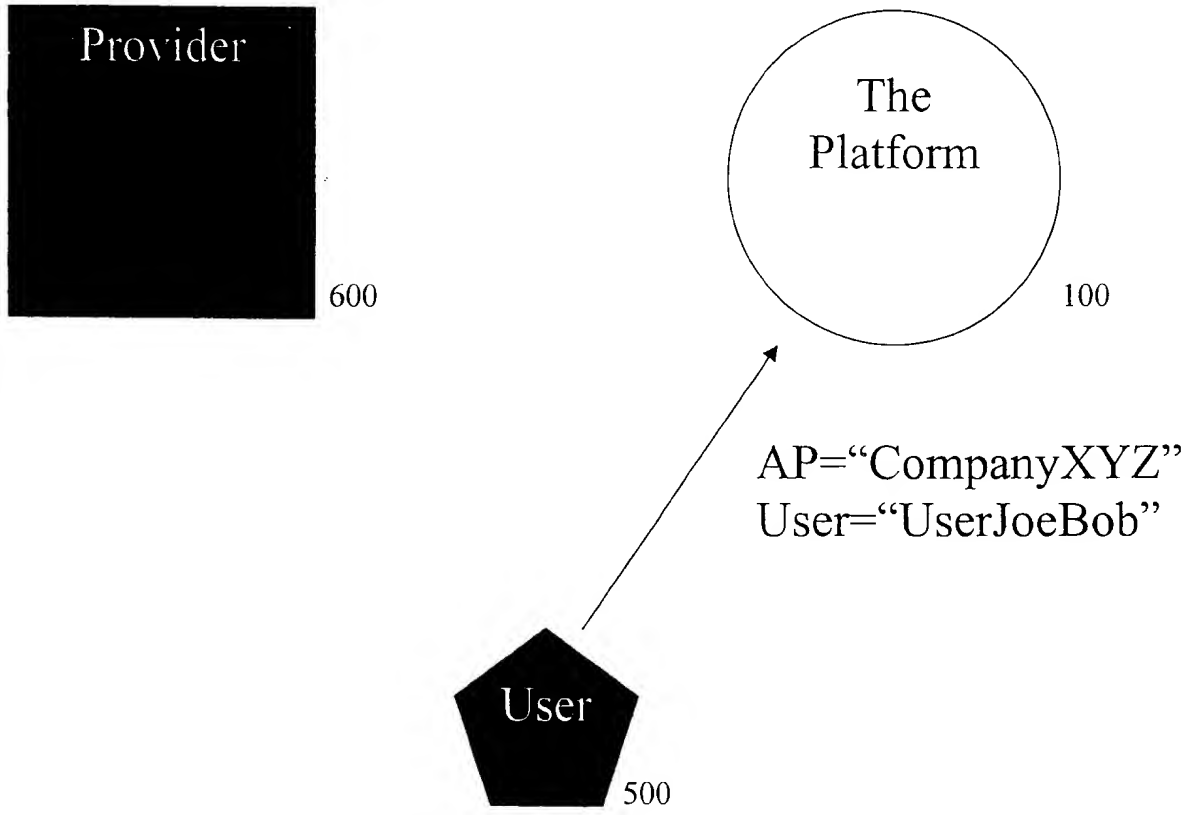

Provider
600
The Platform
100
AP="CompanyXYZ"
User="UserJoeBob"
User
500
www.company.com/hubsite.cgi?ap="CompanyXYZ"&user="UserJoeBob"

Fig. 6P

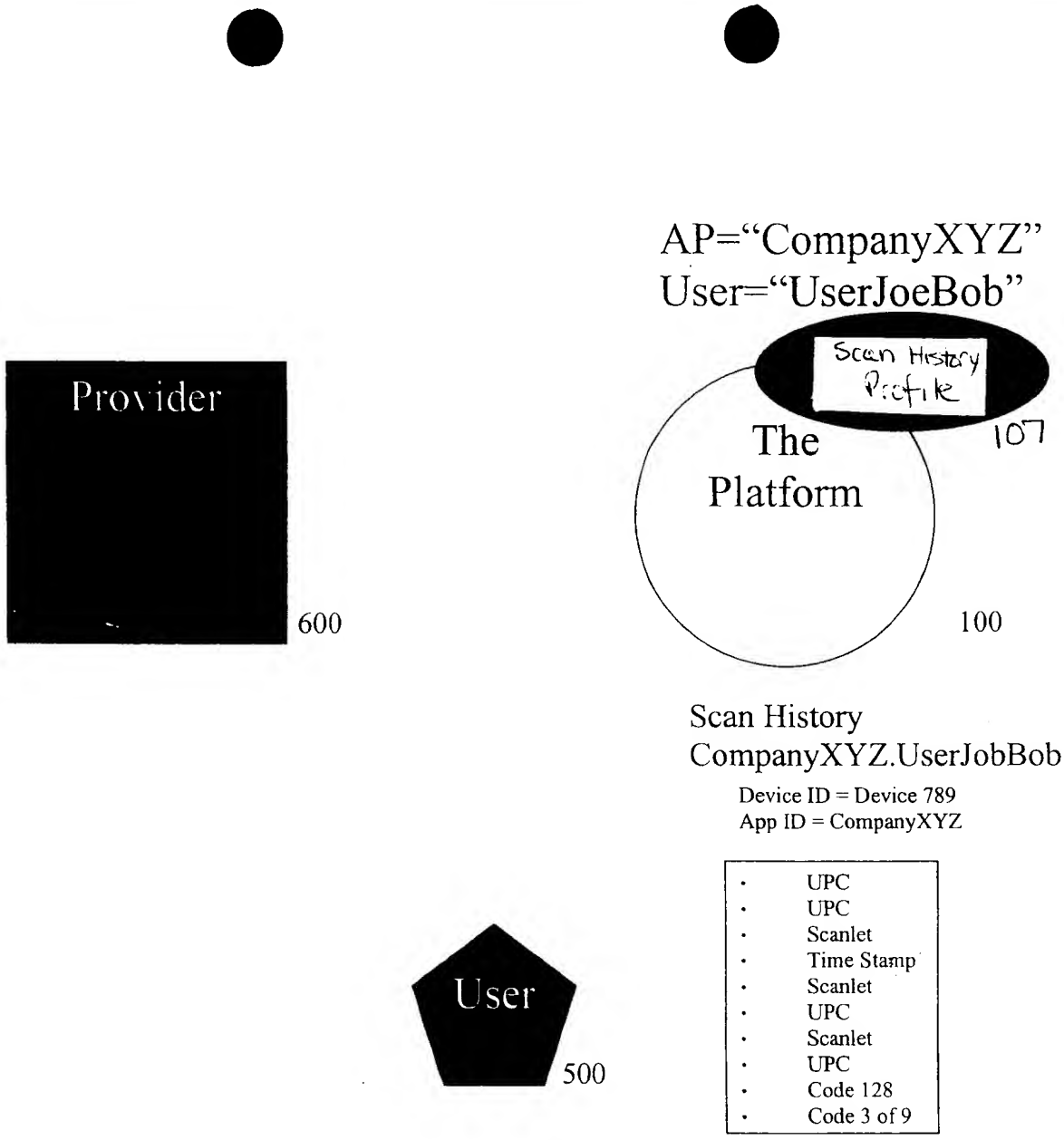

AP="CompanyXYZ"
User="UserJoeBob"
Scan History Profile
107
The Platform
100
Provider
600
User
500
Scan History
CompanyXYZ.UserJobBob
Device ID = Device 789
App ID = CompanyXYZ
UPC
UPC
Scanlet
Time Stamp
Scanlet
UPC
Scanlet
UPC
Code 128
Code 3 of 9

Fig. 6Q

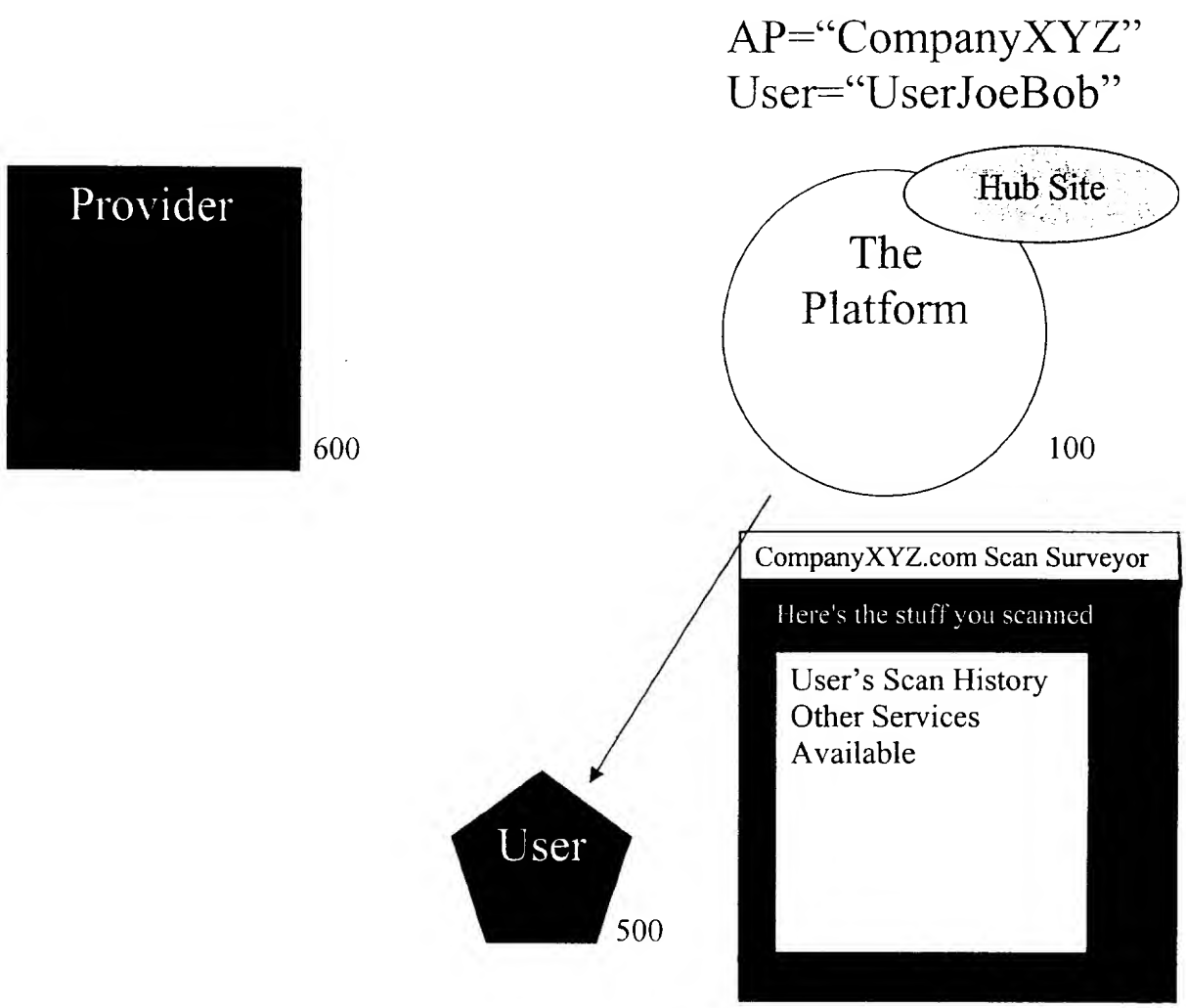

AP="CompanyXYZ"
User="UserJoeBob"
Provider
600
Hub Site
The Platform
100
CompanyXYZ.com Scan Surveyor
Here's the stuff you scanned
User's Scan History
Other Services Available
User
500

Fig. 6R

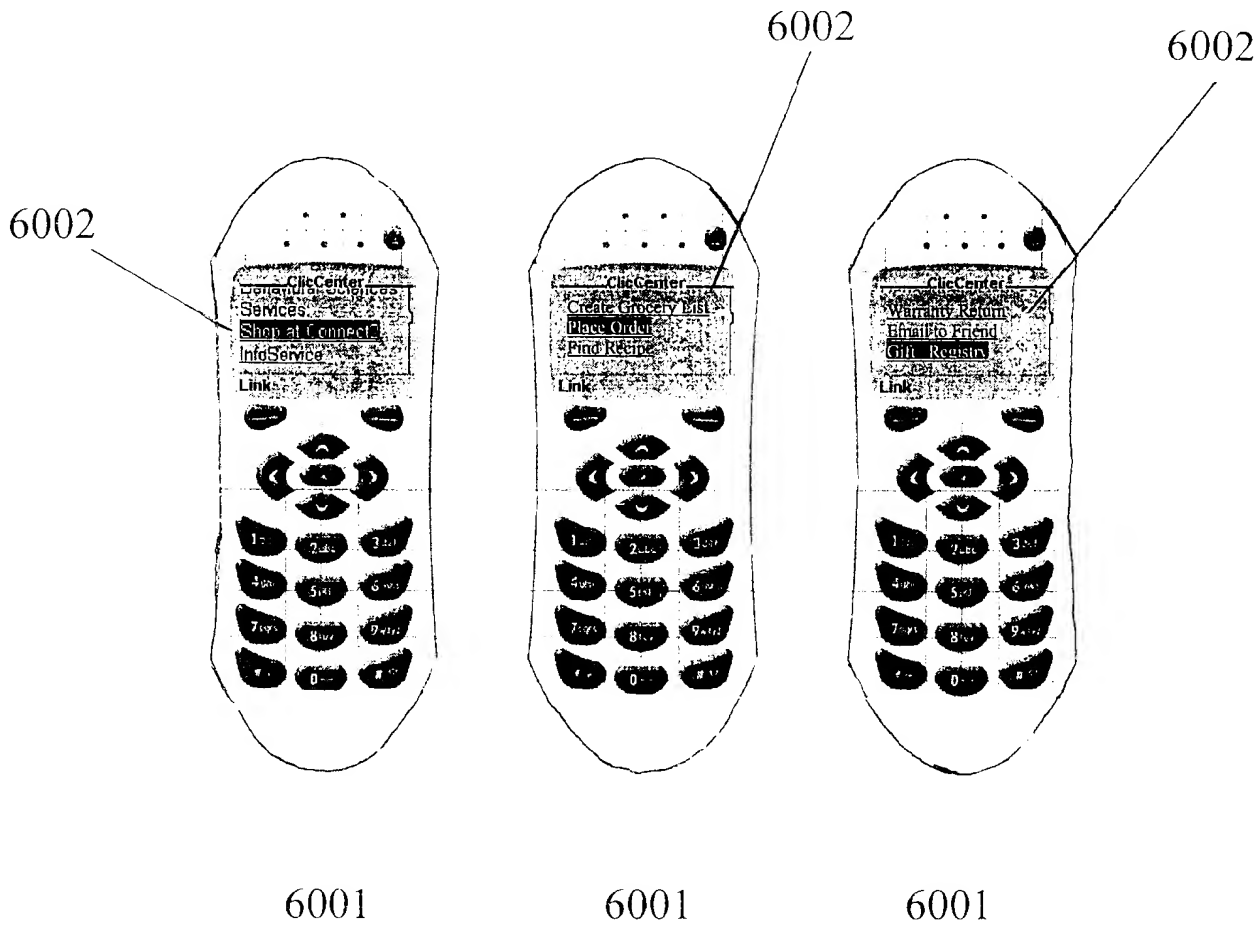

6002
6002
6002
ClieCenter
Services
Shop at Connect
InfoService
Link
ClieCenter
Create Grocery List
Place Order
Find Recipe
Link
ClieCenter
Warranty Return
Email to Friend
Gift Registry
Link
6001
6001
6001

Fig. 6S

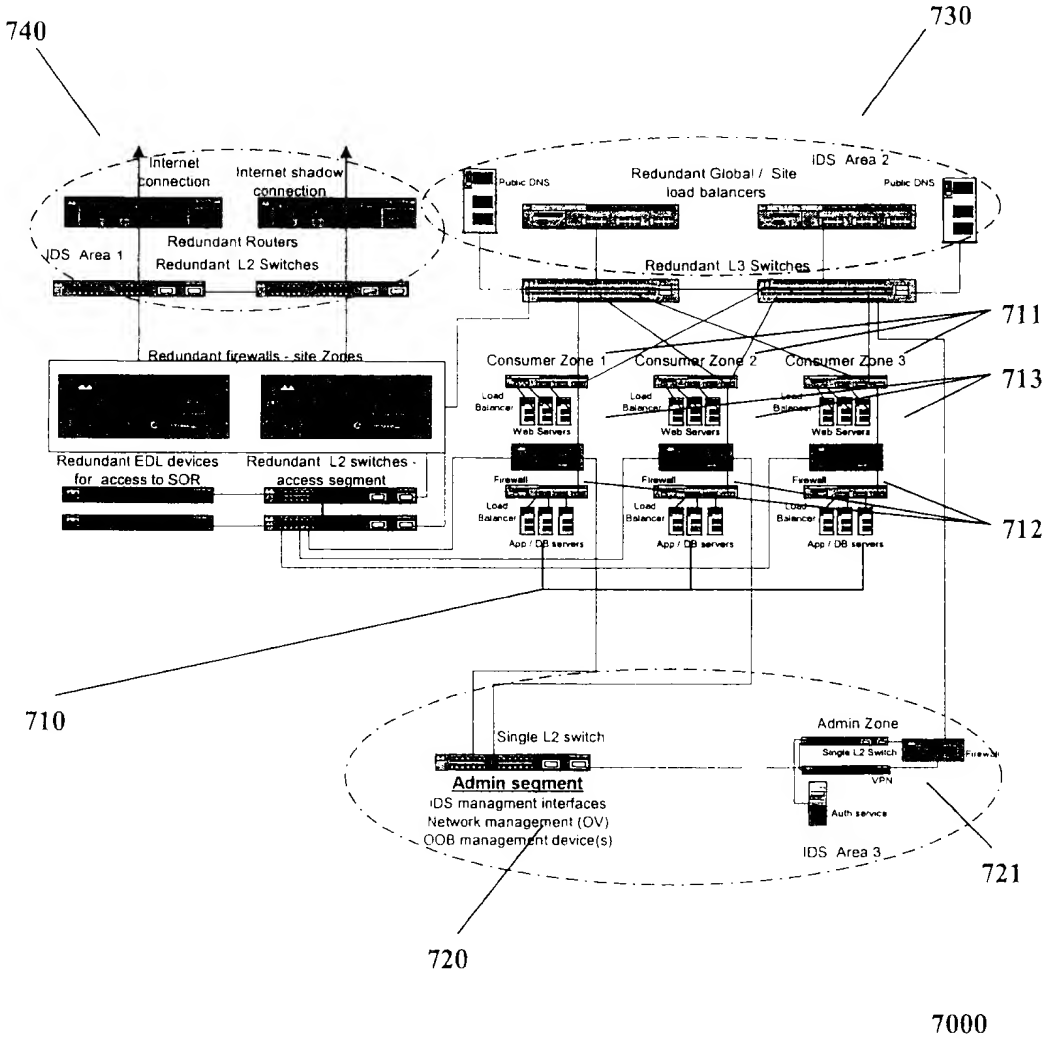

740
730
Internet connection
Internet shadow connection
IDS Area 1
Redundant Routers
Redundant L2 Switches
IDS Area 2
Public DNS
Redundant Global / Site load balancers
Public DNS
Redundant L3 Switches
711
Redundant firewalls - site Zones
Consumer Zone 1
Consumer Zone 2
Consumer Zone 3
713
Load Balancer
Web Servers
Redundant EDL devices for access to SOR
Redundant L2 switches - access segment
Firewall
App / DB servers
712
710
Single L2 switch
Admin Zone
Admin segment
IDS managment interfaces
Network management (OV)
OOB management device(s)
VPN
Auth service
IDS Area 3
721
720
7000

Fig. 7

FIGURE 8

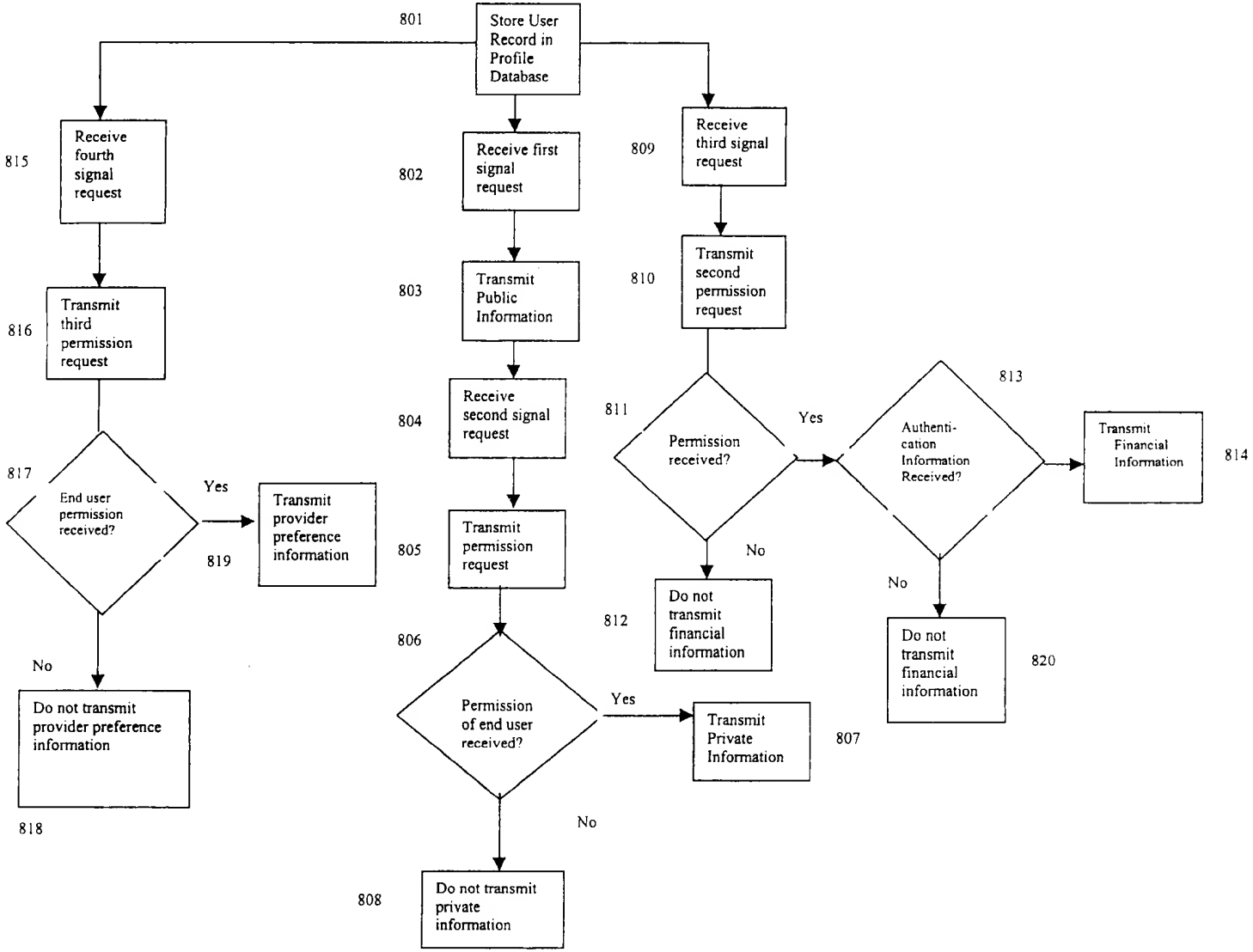

801
Store User Record in Profile Database
802
Receive first signal request
803
Transmit Public Information
804
Receive second signal request
805
Transmit permission request
806
Permission of end user received?
Yes
807
Transmit Private Information
No
808
Do not transmit private information
809
Receive third signal request
810
Transmit second permission request
811
Permission received?
Yes
813
Authenti-cation Information Received?
Yes
814
Transmit Financial Information
No
812
Do not transmit financial information
No
820
Do not transmit financial information
815
Receive fourth signal request
816
Transmit third permission request
817
End user permission received?
Yes
819
Transmit provider preference information
No
818
Do not transmit provider preference information

FIGURE 9

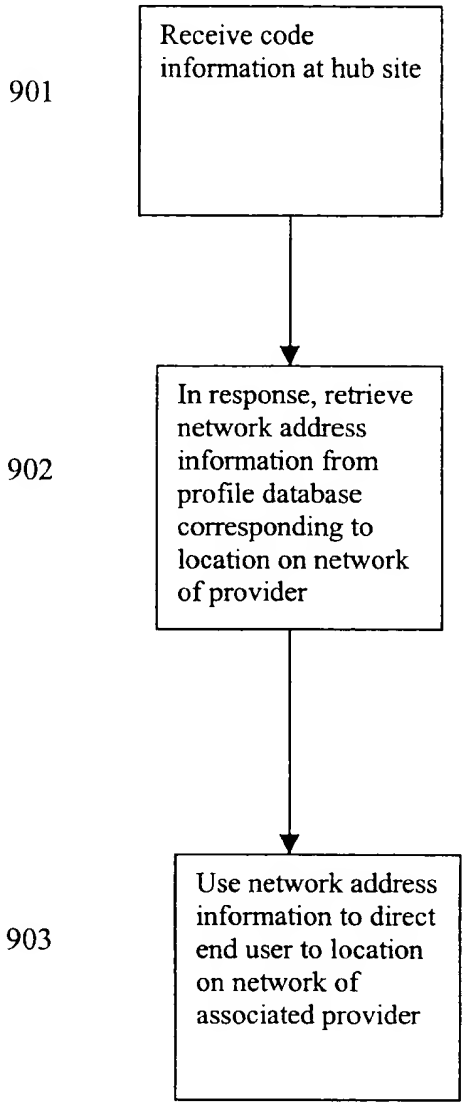

901
Receive code information at hub site
902
In response, retrieve network address information from profile database corresponding to location on network of provider
903
Use network address information to direct end user to location on network of associated provider

FIGURE 10

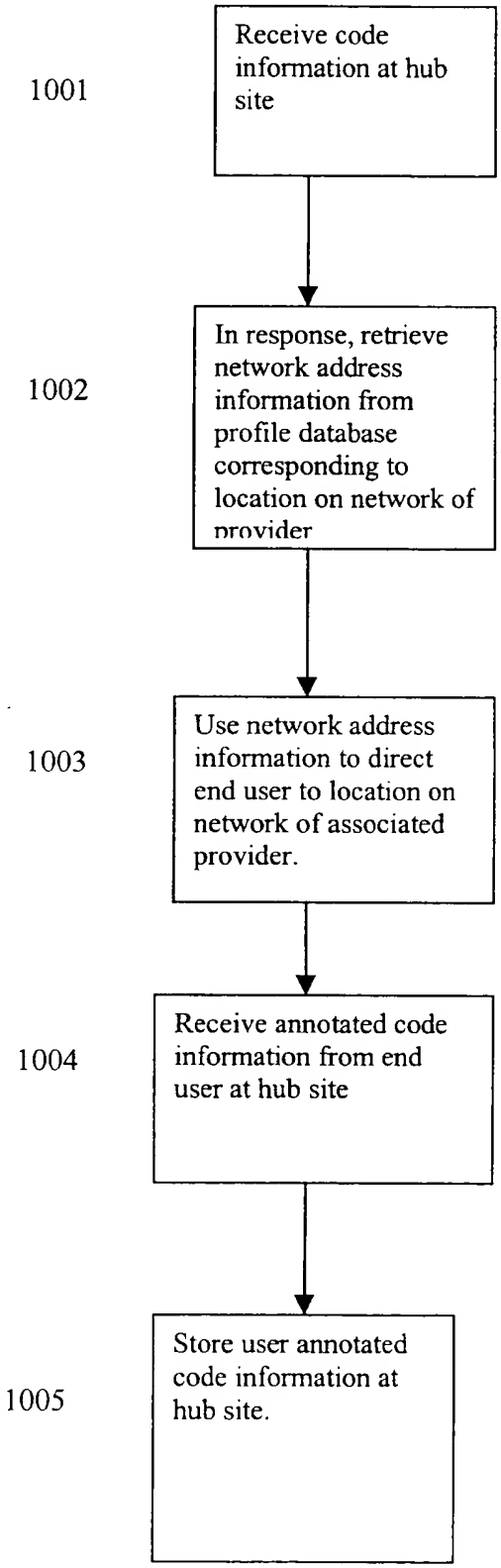

1001
Receive code information at hub site
1002
In response, retrieve network address information from profile database corresponding to location on network of provider
1003
Use network address information to direct end user to location on network of associated provider.
1004
Receive annotated code information from end user at hub site
1005
Store user annotated code information at hub site.

FIGURE 11

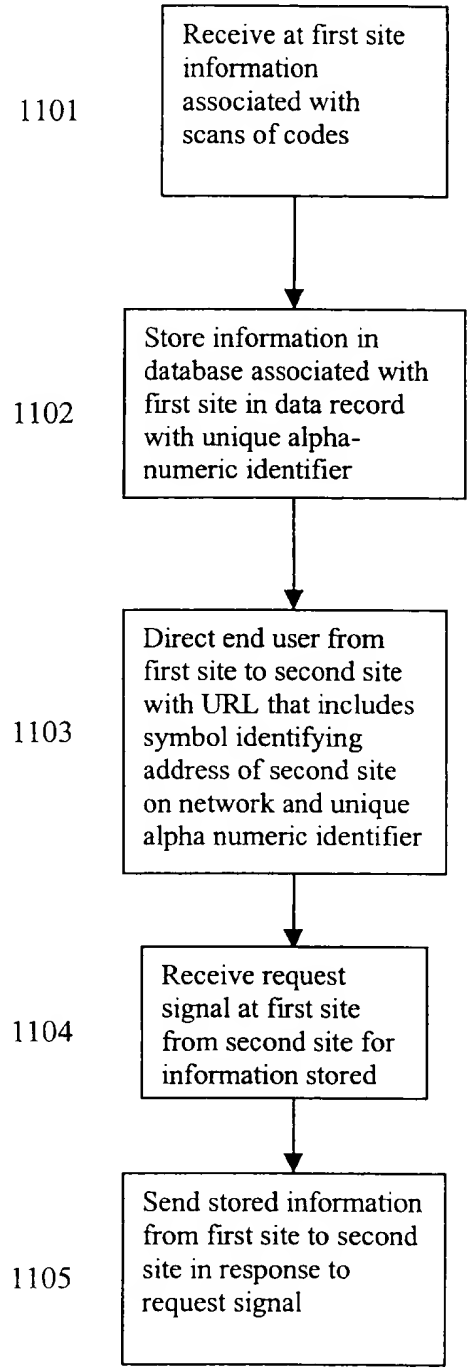
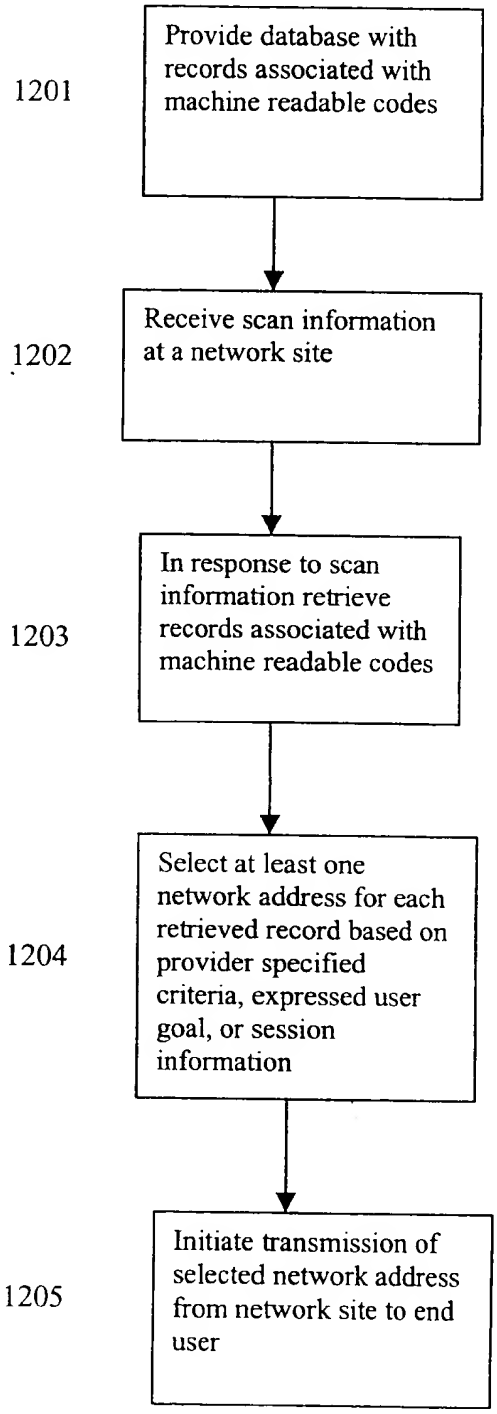

1101
Receive at first site information associated with scans of codes
1102
Store information in database associated with first site in data record with unique alpha-numeric identifier
1103
Direct end user from first site to second site with URL that includes symbol identifying address of second site on network and unique alpha numeric identifier
1104
Receive request signal at first site from second site for information stored
1105
Send stored information from first site to second site in response to request signal

FIGURE 12


1201
Provide database with records associated with machine readable codes
1202
Receive scan information at a network site
1203
In response to scan information retrieve records associated with machine readable codes
1204
Select at least one network address for each retrieved record based on provider specified criteria, expressed user goal, or session information
1205
Initiate transmission of selected network address from network site to end user